SHARP Service Manual

MODEL SA-607H

SPECIFICATIONS

Circuit:	LW/MW/SW/FM 4-band super-heterodyne system stereo tuner-amplifier with FM multiplex circuit with direct coupling amplifier.
Power source:	110/220/240V, 50/60Hz
Semiconductors:	37-transistor (1-FET), 6-IC
Power consumption:	130W
Dimensions:	530(W) x 150(H) x 330(D) mm
Weight:	14kg

FM SECTION

Frequency range:	87.5 – 104MHz
Intermediate frequency:	10.7MHz
FM sensitivity at 240 ohm load, 26dB S/N, 40kHz deviation:	1.5μV
I.F. rejection:	60dB
Image rejection:	40dB
Frequency response:	40Hz – 14,000Hz at 50μs pre-emphasis ±3dB
Distortion:	0.6%
AM suppression:	40dB
Capture ratio:	2dB
S/N:	60dB

FM STEREO SECTION

Separation:	26dB at 1kHz
Distortion:	1%
19kHz rejection:	55dB
38kHz rejection:	55dB

AM SECTION

Frequency range:	(MW); 520 – 1620kHz (SW); 5.9 – 18MHz (LW); 150 – 370kHz
Intermediate frequency:	455 (or 465) kHz
Maximum sensitivity:	(MW); 300μV/m (SW); 60μV (LW); 500μV/m
I.F. rejection:	25dB
Image rejection:	35dB
AGC figure of merit:	45dB

AUDIO SECTION

Music power output:	2 x 60W/4 ohm Both channels drive at 0.1% THD 2 x 66W/4 ohm Both channels drive at 1% THD
Continuous power output:	2 x 35W/4 ohm Both channels drive at 0.1% THD 2 x 38.5W/4 ohm Both channels drive at 1% THD
Distortion:	0.05% at 10W/4 ohm
Intermodulation:	0.2%
Frequency response:	20Hz – 20,000Hz ±1.5dB
Hum and noise: residual:	1mV
Maximum volume:	PHONO –1, –2; 30mV AUX; 15mV TAPE; 15mV
Unweighted S/N:	High, 70dB
Power band width at –3dB from 35W/4 ohm, 0.1%:	10 – 15,000Hz
Output impedance:	4, 8 or 16 ohms
Input sensitivity at 30W/4 ohm output:	PHONO –1, –2 (Mag); 3mV PHONO –1 (ceramic); 150mV AUX; 150mV TAPE; 150mV
Recording output level:	30mV

Specifications or wiring diagrams of this model are subject to change for improvement without prior notice.

SHARP CORPORATION OSAKA, JAPAN

CHASSIS REMOVAL

1. Disconnect all leads connected to the back of the set.
2. Remove 7 screws retaining the chassis (Position: Bottom of the set).
3. Gently pull forward the control panel and chassis from the cabinet.

FRONT PANEL REMOVAL

1. Remove the cabinet as described in Chassis Removal.
2. Remove 5 knobs (VOLUME, BALANCE, BASS, TREBLE, TUNING) from front of the panel.
3. Remove 7 screws retaining the front panel (Position: Upper of the panel/Bottom of the panel).
4. Gently pull forward the panel while holding both sides.

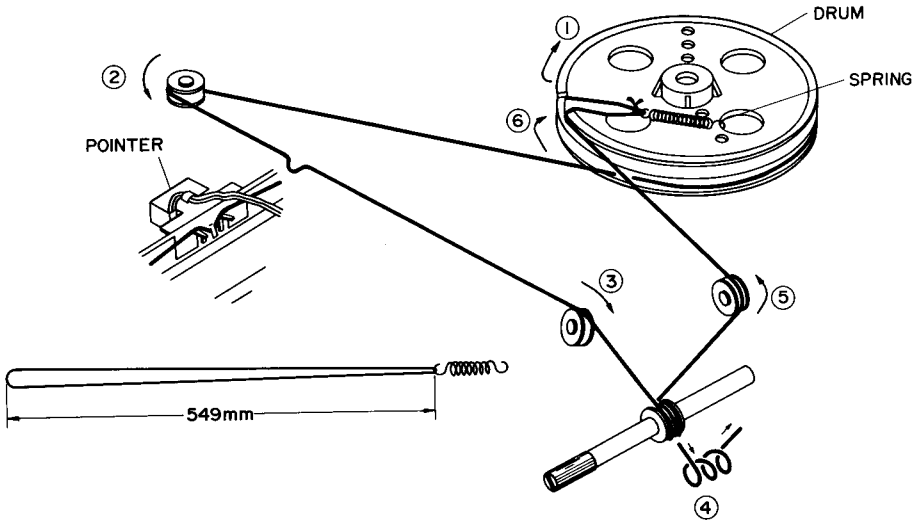


Figure 1 DIAL CORD STRINGING

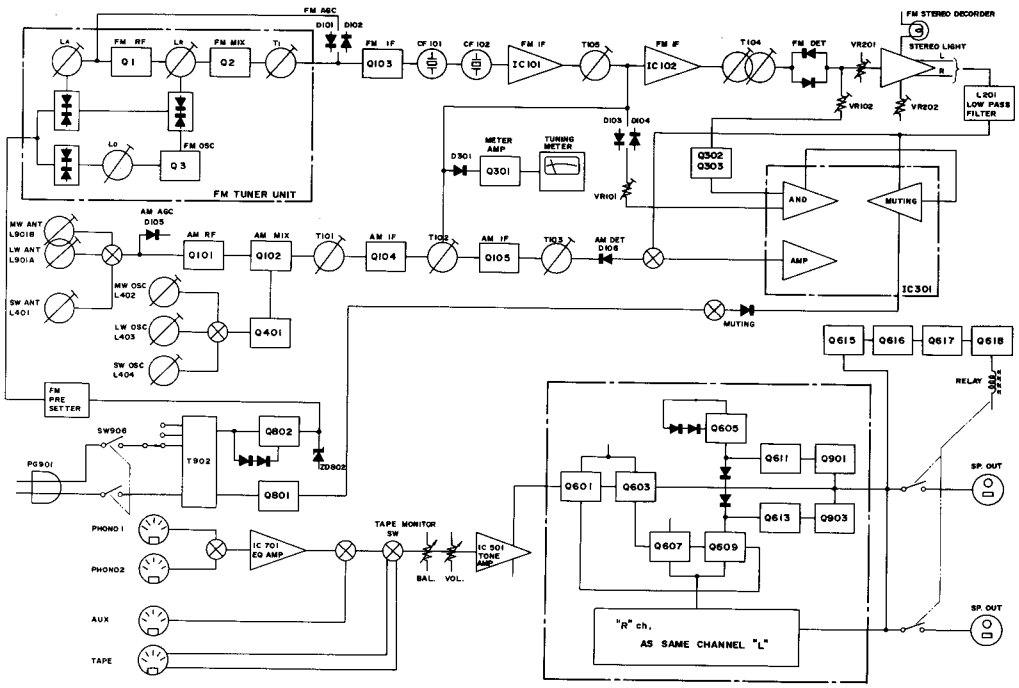


Figure 2 BLOCK DIAGRAM

CIRCUIT DESCRIPTION

FM TUNER SECTION

The tuner of this set is a preset tuner. In the preset tuner variable capacitive diode is used instead of variable capacitor. Variable capacitive diode is a kind of diode, in which the stray capacity between its poles varies in accordance with DC voltage applied to the poles. Since the tuning knob is interlocked to the volume, when the tuning knob is operated the volume also operates to apply the voltage to the variable capacitive diode. The more the voltage applied to the variable capacitive diode D3 increases, the more the stray capacity between poles decreases. Local oscillation frequency (fo) depends upon oscillation coil (Lo) and stray capacity (Co) of D3 and when the voltage applied to D3 becomes smaller, "Co" also becomes smaller, while "fo" larger, Antenna tuning frequency (fA) and RF tuning frequency (fR) are also determined as the above.

Like this, the preset tuner is so designed that it selects the receiving frequency by applying DC voltage to D1 – D3. This tuner is provided with five presetting keys enabling preset tuning in addition to the manual tuning described above.

The five presetting keys comprise variable resistor, respectively. With this variable resistor set at desired station in advance tuning can be done simply by operating the button to turn on or off the switch (SW901 B, C, D, E, F). Balanced signal of 240 ohm given from FM ANT terminal is converted into unbalanced signal of 75 ohm by T901. RF (radio frequency) signal is amplified by FET Q1, which will be mixed at Q2 with the local oscillation frequency given from Q3 and converted into IF (intermediate frequency), then transferred to the next IF section via IFT tuned to 10.7MHz.

FM IF SECTION

Coming from the FM tuner, the IF signal is amplified by the Q103 and then passes through the ceramic filters CF-101 and CF-102. The IF signal is then amplified by the IC101 which consists of 3 stages differential amplifiers. Next, this signal passes through the T105 and after being amplified by the IC102 which consists of 1 stage differential amplifier, it is supplied to the detector coil T104 to be FM demodulated. In this circuit, the D101 and D102 serves FM AGC and the D103 and D104 work to take out the signal for FM muting.

FM STEREO DEMODULATOR SECTION

This set incorporates a stereo demodulator circuit that comprises IC's with the PLL (Phase Locked Loop) system applied. The PLL (Phase Locked Loop) FM demodulator circuit is provided with such characteristics as mentioned below.

In order to demodulate stereo composite signals, it is necessary to take a 19kHz pilot signal out of the stereo composite signals and to make it a 38kHz signal.

Most of the conventional methods to obtain such a 38kHz signal are frequency doubling ones which utilize a nonlinearity of the elements. Compared with the conventional type, the recently developed IC-ed demodulator provides more sufficient separation effects. However, since it also requires 2 or 3 coils like the conventional one, if even one of them is dislocated from the initially adjusted point due to a secular change the separation effects will be deteriorated. Moreover there is such a contradiction that the more the efficiencies of the coils are increased enough to withstand the outer pulse signals like automobil ignition noises, the more the coils suffer secular changes.

To eliminate such disadvantages as above, PLL (Phase Locked Loop) system is employed in the method to make a 38kHz signal using a 19kHz pilot signal.

The PLL system stereo demodulator gives such three merits as:

1. Since the phases of a pilot signal and a 38kHz signal are automatically made the same with each other, the deterioration of separation effect is strongly minimized.
2. Since only one of variable resistor, being newly employed, plays the role of 2 to 3 pieces of conventional coils, troubles of the parts due to secular changes are decreased. In addition, even if this variable resistor is slightly dislocated, the separation effect will never be deteriorated because of the merit as mentioned in 1 by which the automatic phase adjustment is assured.
3. Compared with the conventional one, the PLL system demodulator shows a more noise withstanding characteristic since it has such performances as the selection of frequencies and the continuity of oscillation frequencies (short-time memory), thus assuring a stable stereo demodulation.

Next given are rough explanations on the PLL system stereo demodulator circuit.

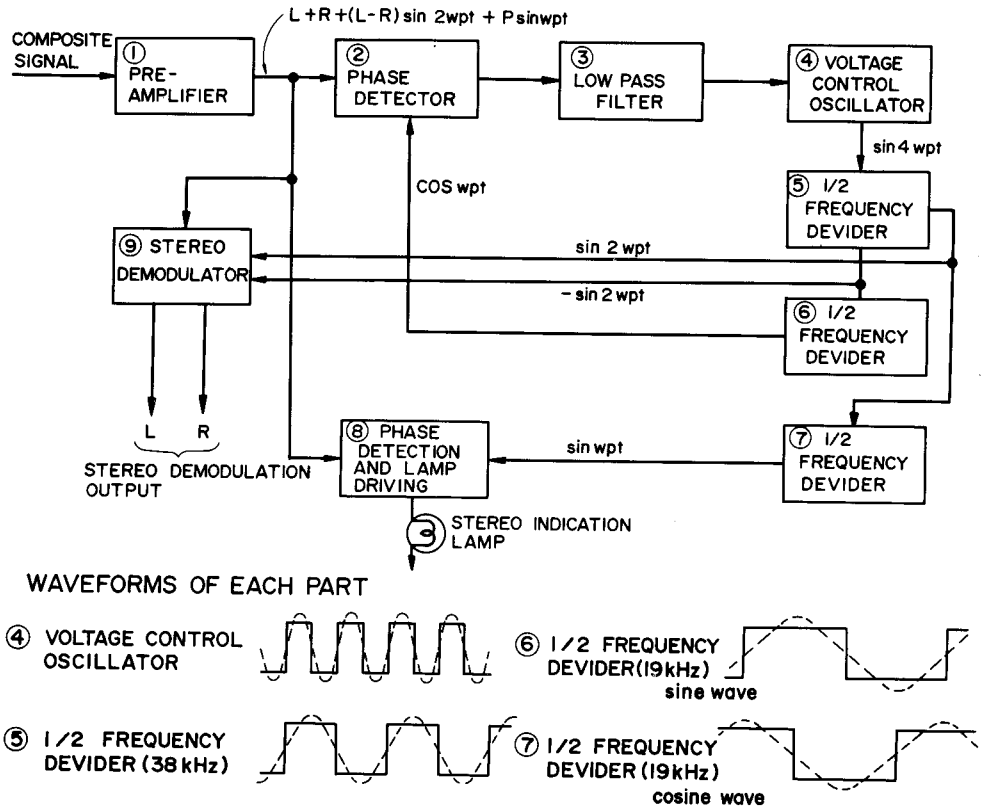


Figure 3

Functions of each part

(1) Pre-amplifier: Amplifies composite signals.
(2) Phase detector: Generates the voltage in proportion to the phase difference between the pilot signal and 1/4 frequency devided signal of the voltage control oscillator.
(3) Low pass filter: Eliminates the high frequency signal and determines the band of loop.
(4) Voltage control oscillator: Varies the frequency in proportion to the voltage. (76kHz oscillation)
(5) 1/2 frequency devider: Forms 38kHz signal.
(6) 1/2 frequency devider: Forms 19kHz signal (cosine wave).
(7) 1/2 frequency devider: Forms 19kHz signal (sine wave).
Compared with (6), the phase lags by 90°.
(8) Phase detector: Detects that the loop is locked and let the stereo lamp put on.
(9) Stereo demodulator: Using a 38kHz signal, it demodulates L and R signals from the composite signal.

With this system, the adjustment of the multiplex section becomes more simple because it can be made by adjusting only two variable resistors; VR202 used for adjusting free running frequency and VR201 used for adjusting the separation. After being demodulated by this IC, the FM signal passes through the low pass filter L201 and the de-emphasis circuit to be supplied to the IC301.

*** FM muting circuit**

All of muting circuit, tuner's pre-amplifier circuit and muting judge circuit are integrated into one IC, i.e., IC301. Its peripheral circuits are as shown below.

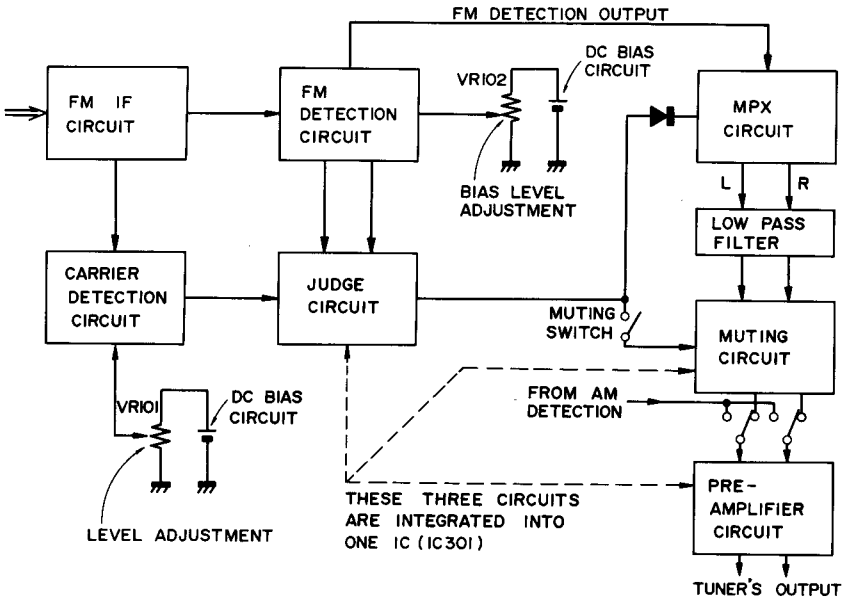


Figure 4

The signal supplied to the judge circuit from the FM detection circuit is as shown below.

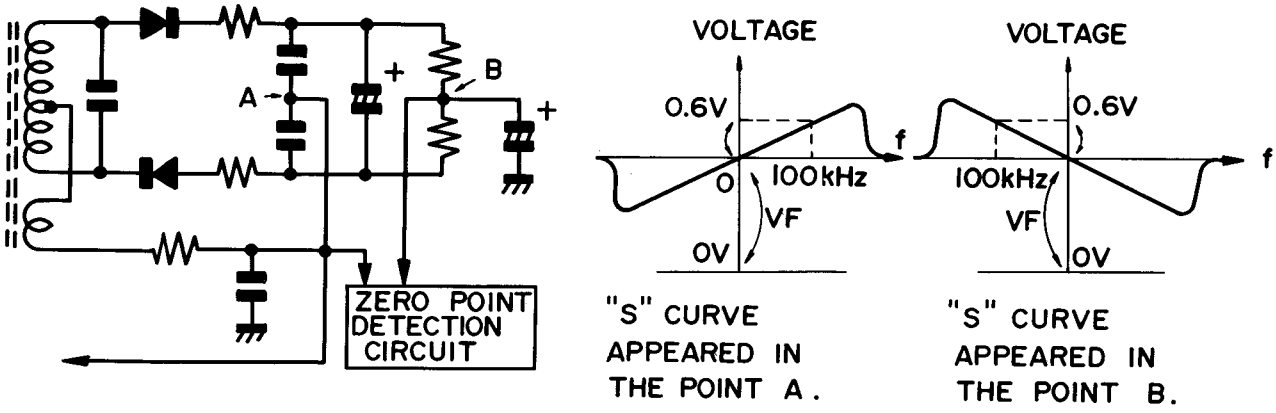


Figure 5

The judge circuit works as follows to determine the muting range. (Refer to "Internal Equivalent Circuit").

As seen from the above figure, it is so designed that the muting becomes uneffective only when the threshold voltage is decreased to less then 0.25V and IF carrier detection output is being caused. Therefore, not only inter-station noise but also side noise are completely eliminated. Moreover, the muting switch causes less popping sound when switched on or off because it is designed to work only with DC.

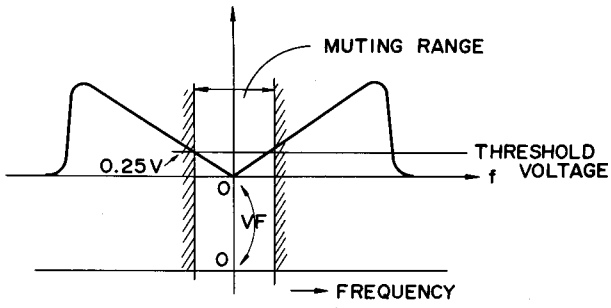


Figure 6

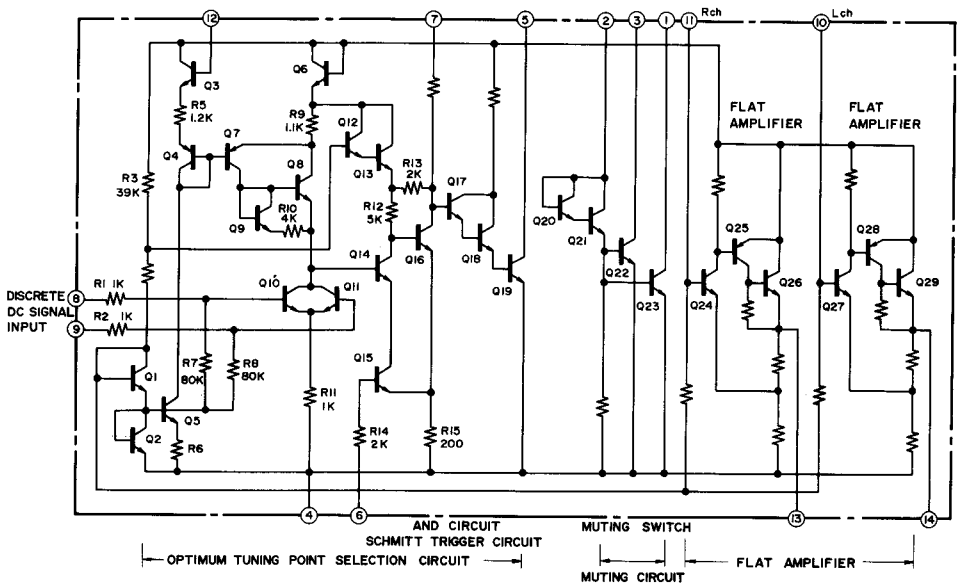


Figure 7

The flat amplifier in this IC operates for AM reception as well as for FM reception.

AM SECTION

AM signal got in on the ferrite bar antenna L901 (for MW, LW) or SW antenna coil L401, also be RF amplifier by Q101. Next, the output is added to MIX circuit (Q102) through capacitor. Q401 is the local oscillator, and it compose of 3-oscillation circuit with L403 (LW), L402 (MW) and L404 (SW). Next, the output is added to Emitter of Q102, and be mixed with RF signal, then converted to 455 kHz intermediate frequency through T101. IF signal is converted to AF output while through Q104, T102, Q105 (be amplified) and T103, detecting diode of D106.

IF signal is fed to Q301 to operate tuning meter.

AUDIO SECTION

In the audio section of this set, IC's are employed for the equalizer and tone control and the main amplifier is an OCL type direct-coupled amplifier.

The all processes from the equalizer to main amplifier operate on split power supply. The EQ circuit is an NF type equalizer circuit because of its IC701 (2-channel). This IC serves the operation amplifier, enabling an accurate RIAA compensation.

The tone circuit uses the same IC as for the equalizer circuit. The CR type tone control circuit is used for the NF loop and its reverse characteristic is utilized. Therefore the MAX and MIN positions of the bass and treble controls are reverse as against the conventional CR type tone control.

With the same reason, the VR curve is of C curve. (For the CR type tone control it is of A curve.)

Main amplifier

The signal amplified by the differential amplifier formed by Q601 and Q603 is further amplified by the differential amplifier formed by Q607 and Q609. The collector output of Q609 is given the bias by D603 and supplied to the power amplifier formed by Q611 and Q901, Q613 and Q903 respectively being the Darlington connection circuits.

The Q605 and D608 make a constant-current circuit and, the D601 and D605 work to protect the transistor from load short.

Protection circuit

Since the main amplifier provides the OCL circuit, if should the internal circuit (transistor, etc.) be damaged, DC will be unbalanced to make appear the DC voltage in the output terminals. It may result in breaking the speaker because such voltage reaches ±32V in the worst case. However, this protection circuit starts to work under the above condition to cut off immediately the speaker circuit.

The function of this circuit is as described below.

The protection circuit formed by the Q615-618 and relay is additionally provided to protect the speaker. When the plus DC voltage appears in between the K613 and K628, it is applied to the base of Q615 via the R653. As the result the current runs in the Q615 and its collector voltage drops more abundantly than in the case of non-signal because of the R661. The Q617 and Q618 are PNP transistors.

The PNP transistor gets conductive when the base voltage becomes minus with respect to the emitter voltage, and therefore the current runs in the Q615 and also in the Q617, to cut off the Q618, then the relay stops to operate.

In a normal condition, as soon as the power switch is turned on, the relay starts to operate to connect the amplifier with the speaker.

In an abnormal condition, however, the relay is cut off to protect the speaker from possible damage. When the voltage between the speaker terminals is plus, the Q616 does not function but when it is minus, the Q616 functions to cut off the relay as in the case the voltage is plus.

The R653, C626 and C627 form low pass filter to prevent the relay being worked by audio signal. The relay is the inductive one and will generates reaction voltage if it is abruptly turned on or off. This voltage is absorbed by the D607, however. The minimum unbalanced DC voltage to make the relay operate is depended upon the value of R661 or R660.

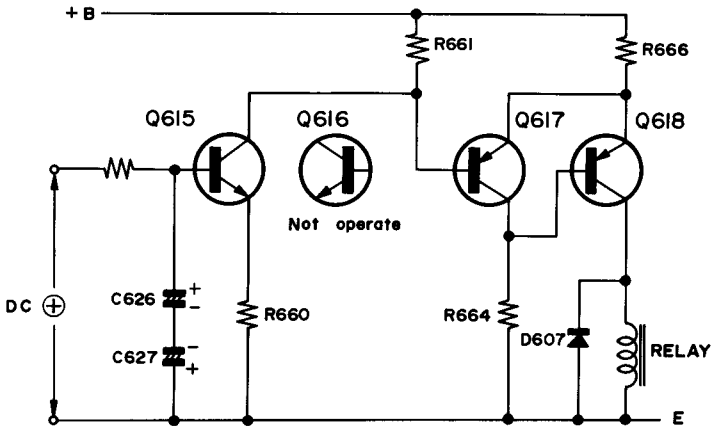


Figure 8

POWER SUPPLY SECTION

The power supply section roughly consists of two sections. One is the power supply section to the main amplifier for which the SR601 through SR604 provide bridge rectification.

This power supply section also supplies the power ±14V to the tone control and equalizer, using zener diodes ZD601 and ZD602. The other is the power supply section to the FM pre-setter where the voltage is rectified by the D801 and stabilized by the D802 and Q802. The Q801 serves a muting device to prevent noises caused when the power switch is turn on or off or when the FM pre-setter key pushed.

NOTE

1. Darligton connection (Figure 9)

Two transistor are connected in a common collector form, to the emitter of a front transistor and to the base of a rear transistor in series.

Thus, these transistors compose a NPN type transistor as illustrated in Figure 9. Higher current than a transistor is obtained. These transistors need fewer additional parts.

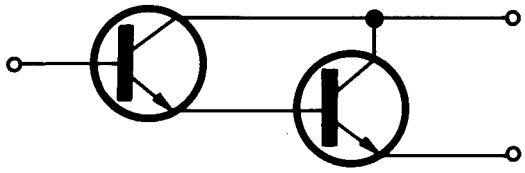


Figure 9

2. RIAA characteristics (Figure 10)

Sound sources on the record discs are generally recorded under the RIAA standard. The curve is characterized to strengthen gradually bass to treble.

For playing back these sound sources, the amplifier should have play back characteristics which gradually strengthen treble to bass. This is called "RIAA recording" or "Play-back characteristics."

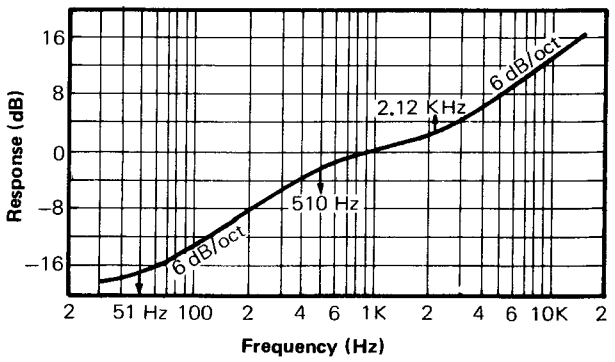


Figure 10

POWER TRANSISTOR REPLACEMENT

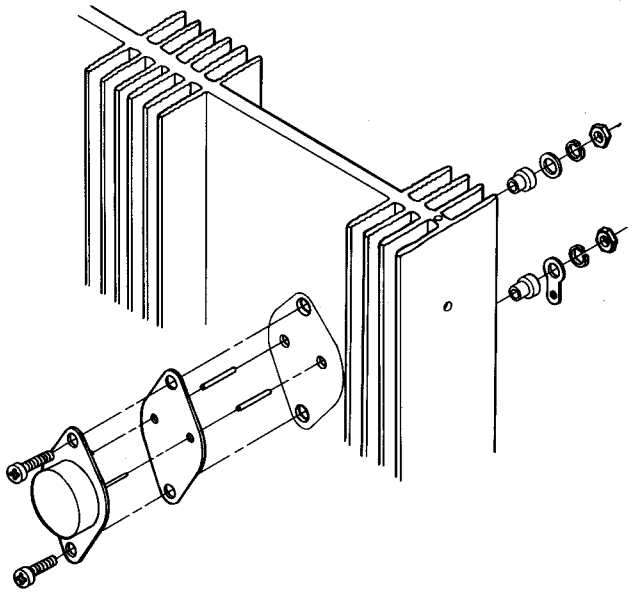


Figure 11

If it is necessary to replace audio output transistors, then follow these procedures to prevent reoccurrence of transistor failure.

1. Carefully remove transistor and mica isolator and clean all the silicone grease off the mica and the mounting area on the chassis. If the mica is damaged, then it must be replaced.
2. Remove the defective transistor and clean out the transistor mounting hole.
3. Put new silicone grease on the transistor mounting area of the chassis and on both side of the mica isolator. Mount the new transistor, being careful to tighten each transistor mounting screw evenly.
   Driving one screw tightly and then the other is likely-to-cause metal filings which may damage the mica or prevent necessary heat dissipation on chassis.
4. Before applying power to the new transistor, with an ohmmeter check to see that there is no short between the transistor case and chassis.

VOLTAGE CHANGING

Be sure to check the pre-set voltage before operating the set. If the voltage is different from your local voltage, select the voltage in the following manner.

1. Disconnect the AC power cord from the outlet in order to prevent an electric shock.
2. Remove the plug cover by unscrewing screw on it. (See Fig. 12A)
3. Pull out the selector plug and reinsert it with the desired voltage coming upward. (See Fig. 12B)
4. Replace the plug cover in its Original position.
   The desired voltage now appears in the plug cover opening. (See Fig. 12A)

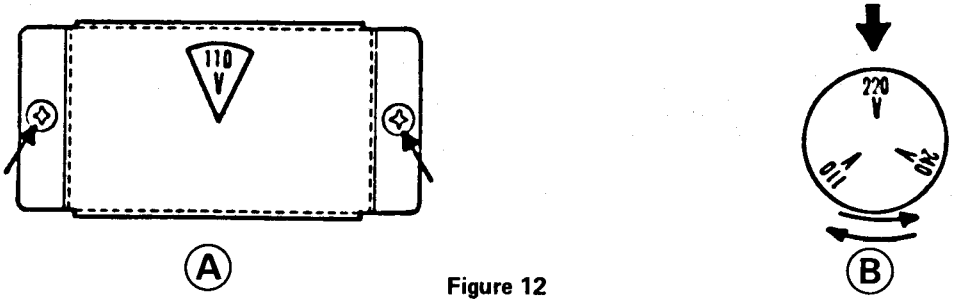


Figure 12

FUSE REPLACEMENT

Before replacing fuses be sure to read carefully the following instructions.

Important: To avoid electric shock be sure to disconnect the AC power cord from the outlet before removing cabinet case and plug cover of voltage selector, and replacing fuses.

1) AC LINE FUSE (F901)

Provided at the back of the amplifier. If the set fails to function due to a blown fuse, remove the AC line fuse and replace it with a new one. Use a 3.15 ampere cartridge fuse for 110V AC or a 1.6 ampere one for 220, 240V.

2) PILOT LAMP FUSE (F601, F602)

Provided inside the main amplifier board. If the pilot lamps do not light while the amplifier is operating, the pilot lamp fuse has been blown. After checking for a short on the wiring of pilot lamps, replace the fuse; use 3.15 ampere fuse.

3) RF AMP PROTECTION FUSE (F801)

If sound through speakers cut, it is probable to blown the protection fuse RF amplifier DC supply, Check for a short on the connections near by D801, If short-circuited, repair it and replace it for new one; use 500 milli ampere fuse.

ALIGNMENT INSTRUCTIONS

Alignment is an exacting procedure and should be undertaken only when necessary. If alignment of AM (MW, LW, SW) and FM is required, either section may be done first. The FM stereo section, however, should be done only if the FM monaural section is properly adjusted.

REQUIRED EQUIPMENT

1. Signal generator with a frequency range of 150kHz to 1650kHz; AM (MW, LW)
2. Signal generator with a frequency range of 5.7MHz to 18.3MHz; AM (SW)
3. Signal generator with a frequency range of 86.5MHz to 108.5MHz; FM
4. Signal generator with a frequency output of 10.7MHz ±0.5MHz; FM
5. Vacuum tube voltmeter (AC-VTVM)
6. Sweep signal generator with a sweep range of at least 500kHz and center frequency of 10.7MHz with at least a 10.7MHz marker may be used.
7. Oscilloscope with a wide range amplifier of approximately 100kHz.
8. Test loops, a coil of any size wire, one turn or more; AM (MW, LW)
9. IEC dummy antenna; AM (SW)
10. Vacuum tube voltmeter (DC-VTVM)
11. FM stereo signal generator.
12. Audio signal generator with a frequency range of 20Hz to 100kHz.
13. Frequency counter with a frequency range of approximately 100kHz.

Notes: Allow the set at least five minutes to warm up before attempting alignment. During alignment keep the signal generator output at the lowest level that will maintain a useble output from the set.

For the adjustment of stereo separation, the FM stereo generator output is usually 1,000μV. Incorrect grounding to the metal chassis may pick up an unwanted 10.7MHz signal from the final IF stage, which will cause a regenerative sweep response on the sweep curve and result in misalignment.

Therefore always connect a ground to point.

Ground connection of signal generator	Chassis ground
Generator modulation (AM)	30%, 400Hz
Generator modulation (FM)	22.5KHz, 400Hz
Generator modulation (FM stereo)	Ch. L. or Ch. R. 12kHz, 1,000Hz Mod.

FM ALIGNMENT INSTRUCTION

In order to comply with FTZ rule; Nr358 S757, please fix the low end and high end dial frequency on FM (UKW) band by the adjusting procedures as shown below.

Adjustment is made to get a peak reception of a generated standard signal at the frequency of 87.5MHz (Low end) and 104MHz (High end.)

1. Push the function selector button "U-FM" and the FM manual tuning switch.
2. Tune in lowest frequency with the tuning knob.
3. Adjustment is made to get a peak reception of a generated standard signal at the frequency of 87.5MHz with OSC adjuster; VR802.
4. Tune in highest frequency with the tuning knob.
5. Push the FM monaural tuning switch.
6. Adjustment is made to get peak reception of a generated standard signal at the frequency of 104MHz with OSC adjuster; VR801.

AM IF ALIGNMENT (MW, SW, LW)

PROCEDURE NUMBER	Sweep Generator		Dial Pointer Setting	Selector Setting	Meter Connection	Adjustment	Remarks
	Connection	Frequency					
1	Thru 0.01 MFD to Q102 Base as small as possible	455kHz (Modulated)	High end of Dial	Function Selector (MW)	TP103	T101 T102 T103	Maximum response at 455kHz Repeat 2 or 3 times

* However, as for the set of England, adjust IF to 465kHz.

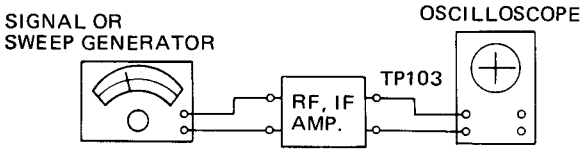


Figure 13
AM IF ALIGNMENT EQUIPMENT CONNECTIONS

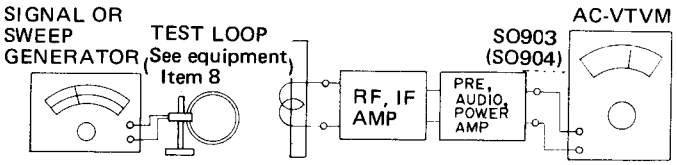


Figure 14
MW/LW RF ALIGNMENT EQUIPMENT CONNECTIONS

MW RF ALIGNMENT

PROCEDURE NUMBER	Signal Generator		Dial Pointer Setting	Selector Setting	Meter Connection	Adjustment	Remarks
	Connection	Frequency					
1	Radiated Signal as small as possible	513kHz: Modulated	Low end of Dial	Function Selector (MW)	Across Output Load (SO903 or SO904)	Oscillator Coil L402	Volume Control maximum. Adjust for maximum output. Repeat 2 or 3 times.
2	Radiated Signal as small as possible	1650kHz Modulated	High end of Dial	Same as above	Same as above	Oscillator Trimmer TC404	Same as above
3	Radiated Signal as small as possible	1400kHz Modulated	1400kHz	Same as step 1	Same as step 1	Tuning Trimmer TC402	Same as step 1
4	Radiated Signal as small as possible	600kHz Modulated	600kHz	Same as step 1	Same as step 1	Antenna Coil L901B	Same as step 1

LW RF ALIGNMENT

PROCEDURE NUMBER	Signal Generator		Dial Pointer Setting	Selector Setting	Meter Connection	Adjustment	Remarks
	Connection	Frequency					
1	Radiated Signal as small as possible	145kHz Modulated	Low end of Dial	Function Selector (LW)	Across Output Load (SO903 or SO904	Oscillator Coil L403	Volume Control maximum. Adjust for maximum output. Repeat 2 or 3 times.
2	Radiated Signal as small as possible	385kHz Modulated	High end of Dial	Same as above	Same as above	Oscillator Trimmer TC405	Same as above
3	Radiated Signal as small as possible	170kHz Modulated	170kHz	Same as step 1	Same as step 1	Antenna Coil L901A	Same as step 1
4	Radiated Signal as small as possible	340kHz Modulated	340kHz	Same as step 1	Same as step 1	Tuning Trimmer TC403	Same as step 1

SW RF ALIGNMENT

PROCEDURE NUMBER	Signal Generator		Dial Pointer Setting	Selector Setting	Meter Connection	Adjustment	Remarks
	Connection	Frequency					
1	AM Signal generator connected to the AM EXT ANT terminal (SO902) through IEC dummy as small possible	5.7 MHz Modulated	Low end of Dial	Function Selector (SW)	Acros Output Load (SO903 or SO904)	Oscillator Coil L404	Volume Control maximum Adjust for maximum output. Repeat 2 or 3 times
2	Same as above	18.3 MHz Modulated	High end of Dial	Same as above	Same as above	Oscillator Trimmer TC406	Same as above
3	Same as step 1	6.5 MHz Modulated	6.5 MHz	Same as step 1	Same as step 1	Antenna Coil L401	Same as step 1
4	Same as step 1	16 MHz Modulated	16 MHz	Same as step 1	Same as step 1	Tuning Trimmer TC401	Same as step 1

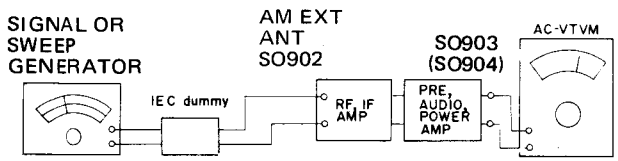
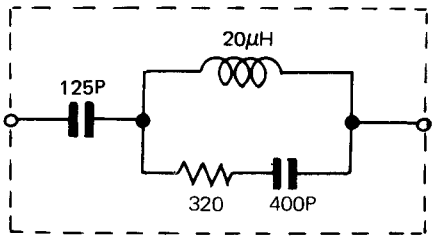


Figure 15 SW RF ALIGNMENT EQUIPMENT CONNECTIONS



IEC Dummy

FM IF ALIGNMENT

PROCEDURE NO.	Test Stage	Signal or Sweep Generator			Dial Pointer Setting	Selector Setting	Meter Connection	Adjustment	Remarks
		Connection	Frequency	Modulation					
1	IF	Detune T104 (Secondary side) completely							
2	IF	FM signal generator connected to the FM ANT terminal	10.7 MHz ±500kHz	Unmodulated	High end of dial	Function Selector (FM)	TP104 (Oscilloscope)	T1, T105 and T104 (Primary side)	Set curve at maximum as shown in the Figure 16.
3	Ratio Detector		10.7 MHz ±500kHz		Same as above	Same as above		T104 (Secondary side)	Top core adjustment: Make the height of two peaks of "S" curve equal. Bottom core adjustment; Make the lineality of "S" curve best
4	If necessary, repeat Step 2 – Step 3.								

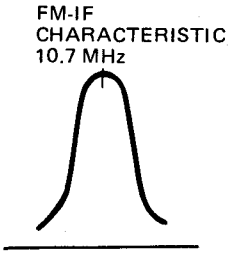


Figure 16

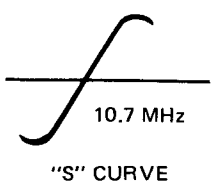


Figure 17

[Caution]

FM RF ALIGNMENT

The preset tuner provided in this unit was completely adjusted before its delivery. Therefore, never touch the following parts in the preset tuner front end without special reasons.

FM MPX ALIGNMENT

PROCE-DURE NO.	Test Stage	Signal or Sweep Generator			Dial Pointer Setting	Selector Setting	Meter Connection	Adjust-ment	Remarks
		Connection	Frequency	Modulation					
1	MPX					Function selector (FM STEREO)	Connect the Fre-quency counter to TP105 (10 pin of IC 201).	VR202	Adjust so that the frequency becomes 19.0 kHz.
2	MPX	FM signal gene rator connect-ed to the FM ANT terminal through 300 ohm dummy	98 MHz	Stereo Mod. (1000 Hz) L only	98 MHz	Same as above	Across ChR output load	VR201	Make the L to R crosstalk minimum

* Output level of FM Signal Generator which is modulated by a FM Stereo Signal Generator shall be 1000μV (60 dB)

* If without the frequency counter, proceed with the alignment as follows. While receiving a FM stereo signal, turn the VR202 until the PLL will be locked (when it is locked, the stereo indicator will be lit.) Then, reversely turn the VR202 halfway and fix it.

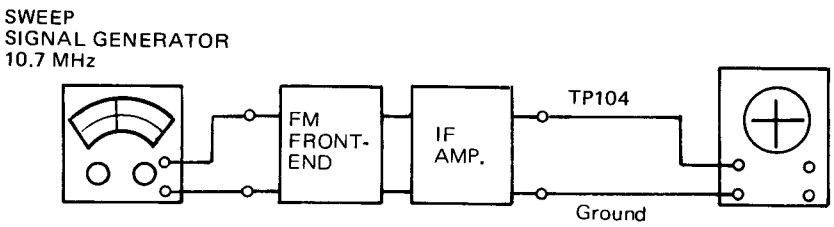


Figure 18 FM IF ALIGNMENT EQUIPMENT CONNECTIONS

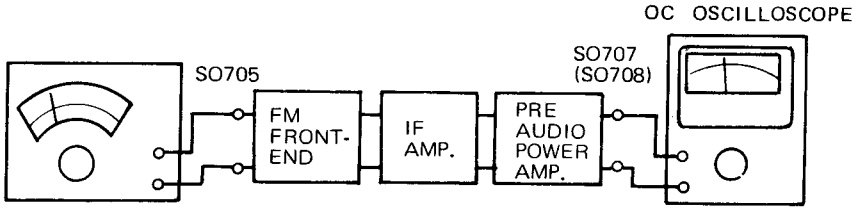
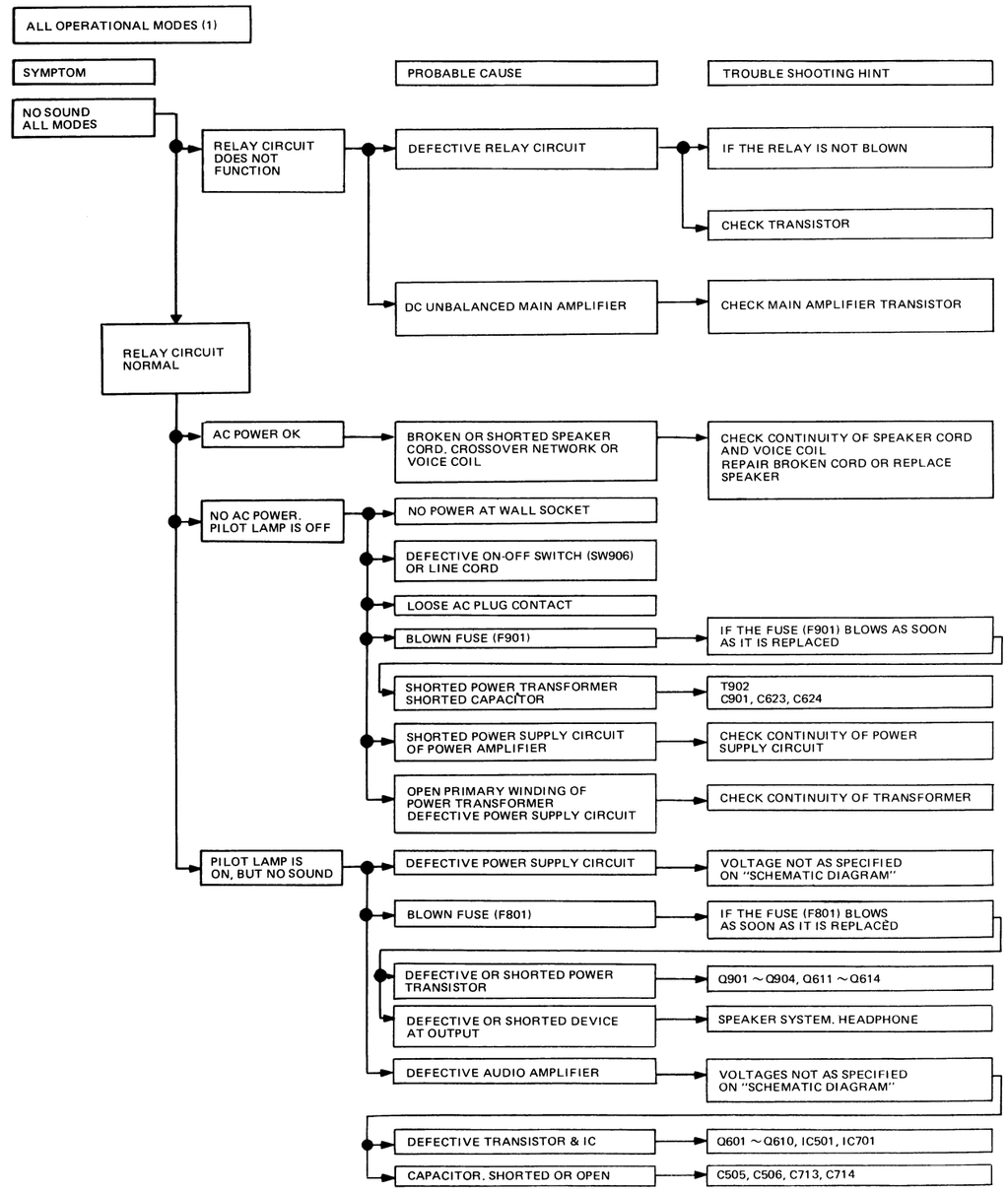


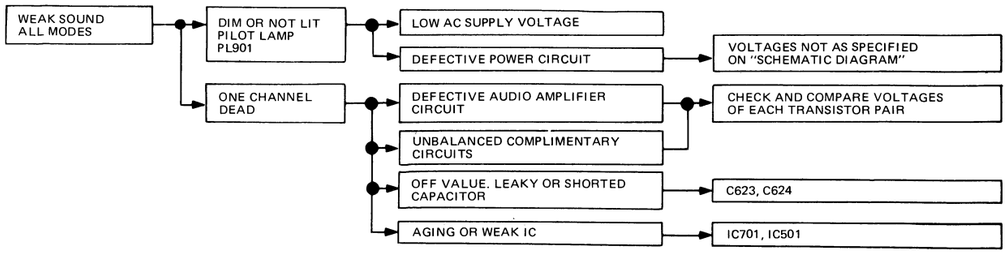
Figure 19 FM STEREO ALIGNMENT EQUIPMENT CONNECTIONS

AF ALIGNMENT

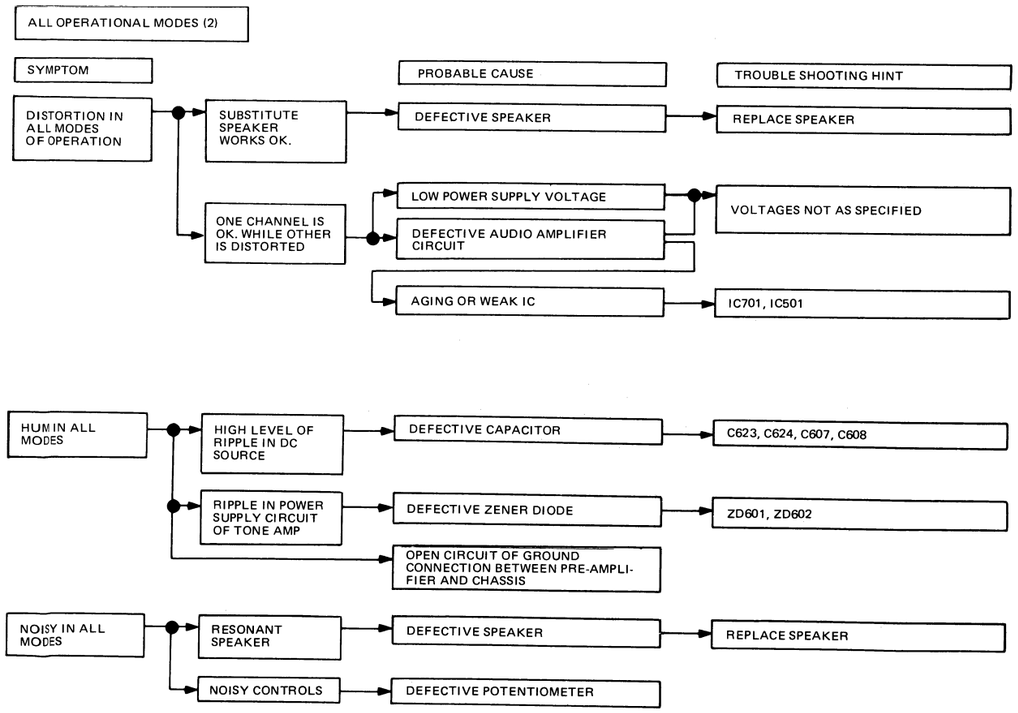
PROCEDURE NUMBER	Alignment	Meter	Output Indicator	Setting	Adjustment	Remarks
1	Output DC Voltage (Offset Voltage)	±3V or ±1V DC Volt meter	Voltmeter is connected to output terminal (SO903, SO904)		VR603 VR604	0 Volt
2	Idle Current	30mV DC Voltmeter	Voltmeter is connected between Emitter of Q901 (or Q902) and ground	Volume minimum Other knobs are in normal position.	VR601 VR602	25mV

TROUBLE SHOOTING GUIDE (1)

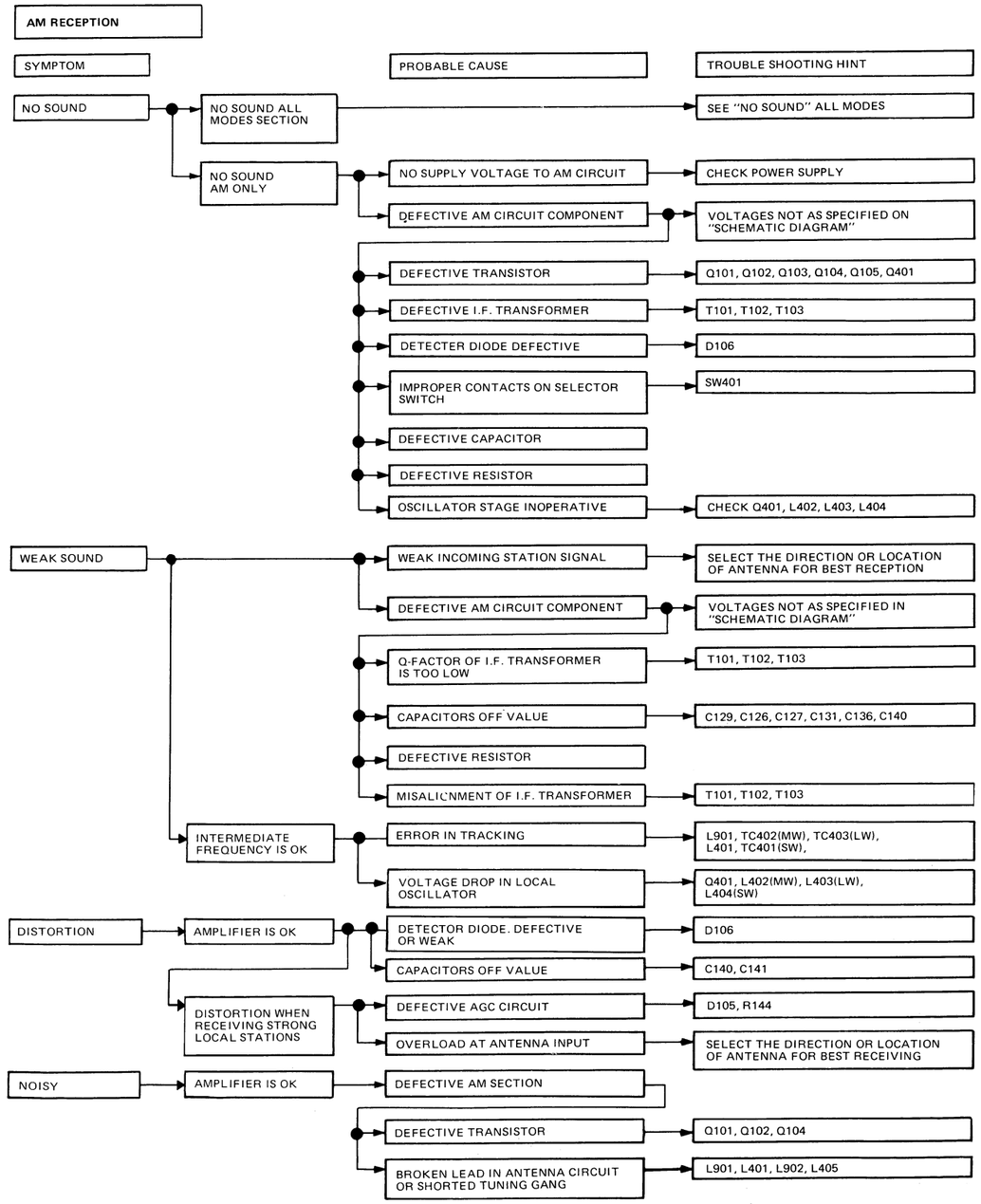

ALL OPERATIONAL MODES (1)
SYMPTOM
PROBABLE CAUSE
TROUBLE SHOOTING HINT
NO SOUND ALL MODES
RELAY CIRCUIT DOES NOT FUNCTION
DEFECTIVE RELAY CIRCUIT
IF THE RELAY IS NOT BLOWN
CHECK TRANSISTOR
DC UNBALANCED MAIN AMPLIFIER
CHECK MAIN AMPLIFIER TRANSISTOR
RELAY CIRCUIT NORMAL
AC POWER OK
BROKEN OR SHORTED SPEAKER CORD, CROSSOVER NETWORK OR VOICE COIL
CHECK CONTINUITY OF SPEAKER CORD AND VOICE COIL REPAIR BROKEN CORD OR REPLACE SPEAKER
NO AC POWER, PILOT LAMP IS OFF
NO POWER AT WALL SOCKET
DEFECTIVE ON-OFF SWITCH (SW906) OR LINE CORD
LOOSE AC PLUG CONTACT
BLOWN FUSE (F901)
IF THE FUSE (F901) BLOWS AS SOON AS IT IS REPLACED
SHORTED POWER TRANSFORMER SHORTED CAPACITOR
T902 C901, C623, C624
SHORTED POWER SUPPLY CIRCUIT OF POWER AMPLIFIER
CHECK CONTINUITY OF POWER SUPPLY CIRCUIT
OPEN PRIMARY WINDING OF POWER TRANSFORMER DEFECTIVE POWER SUPPLY CIRCUIT
CHECK CONTINUITY OF TRANSFORMER
PILOT LAMP IS ON, BUT NO SOUND
DEFECTIVE POWER SUPPLY CIRCUIT
VOLTAGE NOT AS SPECIFIED ON "SCHEMATIC DIAGRAM"
BLOWN FUSE (F801)
IF THE FUSE (F801) BLOWS AS SOON AS IT IS REPLACED
DEFECTIVE OR SHORTED POWER TRANSISTOR
Q901 ~ Q904, Q611 ~ Q614
DEFECTIVE OR SHORTED DEVICE AT OUTPUT
SPEAKER SYSTEM. HEADPHONE
DEFECTIVE AUDIO AMPLIFIER
VOLTAGES NOT AS SPECIFIED ON "SCHEMATIC DIAGRAM"
DEFECTIVE TRANSISTOR & IC
Q601 ~ Q610, IC501, IC701
CAPACITOR. SHORTED OR OPEN
C505, C506, C713, C714


WEAK SOUND ALL MODES
DIM OR NOT LIT PILOT LAMP PL901
LOW AC SUPPLY VOLTAGE
DEFECTIVE POWER CIRCUIT
VOLTAGES NOT AS SPECIFIED ON "SCHEMATIC DIAGRAM"
ONE CHANNEL DEAD
DEFECTIVE AUDIO AMPLIFIER CIRCUIT
CHECK AND COMPARE VOLTAGES OF EACH TRANSISTOR PAIR
UNBALANCED COMPLIMENTARY CIRCUITS
OFF VALUE, LEAKY OR SHORTED CAPACITOR
C623, C624
AGING OR WEAK IC
IC701, IC501

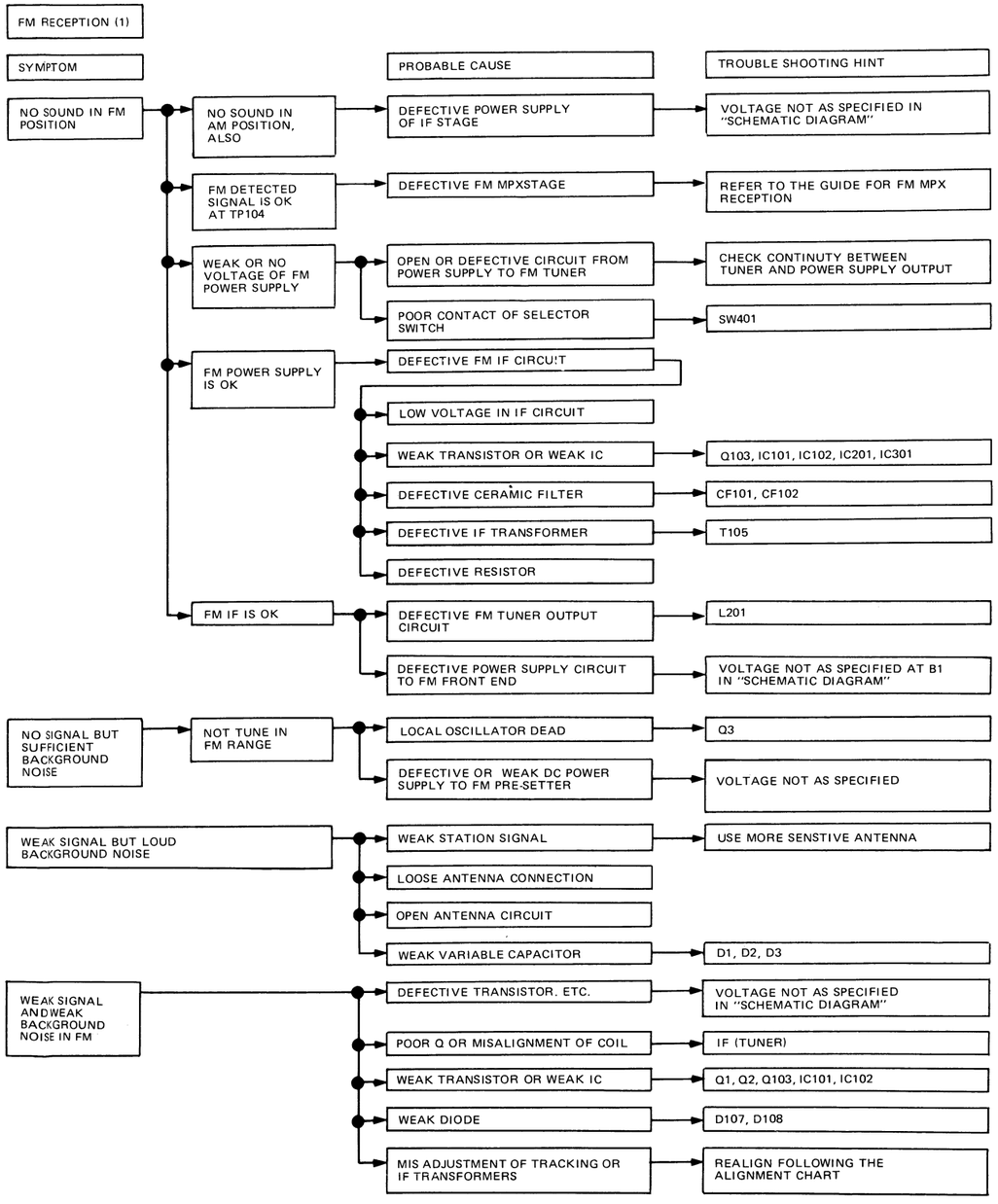
TROUBLE SHOOTING GUIDE (2)



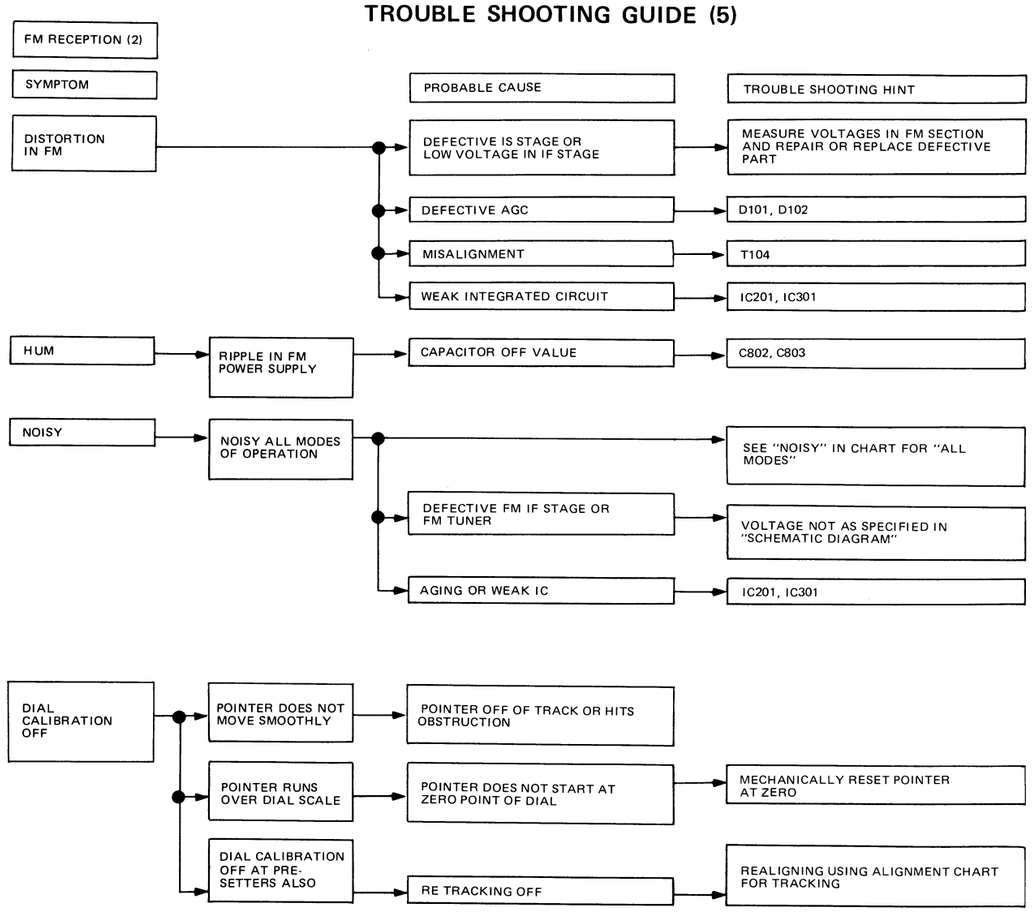
TROUBLE SHOOTING GUIDE (3)



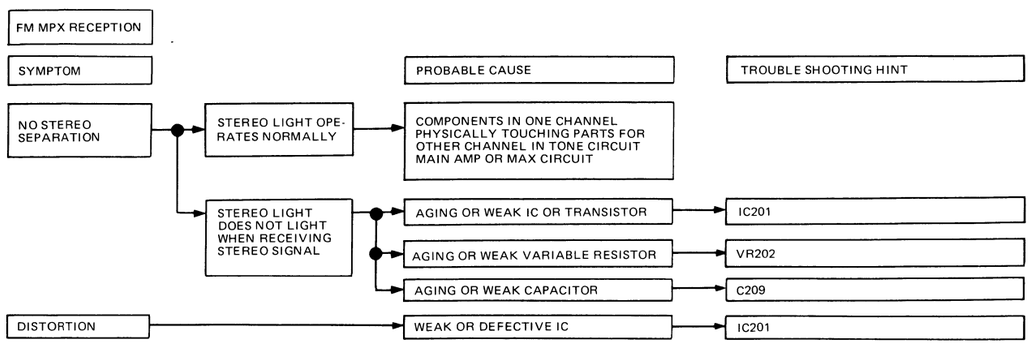
TROUBLE SHOOTING GUIDE (4)


FM RECEPTION (1)
SYMPTOM
PROBABLE CAUSE
TROUBLE SHOOTING HINT
NO SOUND IN FM POSITION
NO SOUND IN AM POSITION, ALSO
DEFECTIVE POWER SUPPLY OF IF STAGE
VOLTAGE NOT AS SPECIFIED IN "SCHEMATIC DIAGRAM"
FM DETECTED SIGNAL IS OK AT TP104
DEFECTIVE FM MPXSTAGE
REFER TO THE GUIDE FOR FM MPX RECEPTION
WEAK OR NO VOLTAGE OF FM POWER SUPPLY
OPEN OR DEFECTIVE CIRCUIT FROM POWER SUPPLY TO FM TUNER
CHECK CONTINUTY BETWEEN TUNER AND POWER SUPPLY OUTPUT
POOR CONTACT OF SELECTOR SWITCH
SW401
FM POWER SUPPLY IS OK
DEFECTIVE FM IF CIRCUIT
LOW VOLTAGE IN IF CIRCUIT
WEAK TRANSISTOR OR WEAK IC
Q103, IC101, IC102, IC201, IC301
DEFECTIVE CERAMIC FILTER
CF101, CF102
DEFECTIVE IF TRANSFORMER
T105
DEFECTIVE RESISTOR
FM IF IS OK
DEFECTIVE FM TUNER OUTPUT CIRCUIT
L201
DEFECTIVE POWER SUPPLY CIRCUIT TO FM FRONT END
VOLTAGE NOT AS SPECIFIED AT B1 IN "SCHEMATIC DIAGRAM"
NO SIGNAL BUT SUFFICIENT BACKGROUND NOISE
NOT TUNE IN FM RANGE
LOCAL OSCILLATOR DEAD
Q3
DEFECTIVE OR WEAK DC POWER SUPPLY TO FM PRE-SETTER
VOLTAGE NOT AS SPECIFIED
WEAK SIGNAL BUT LOUD BACKGROUND NOISE
WEAK STATION SIGNAL
USE MORE SENSTIVE ANTENNA
LOOSE ANTENNA CONNECTION
OPEN ANTENNA CIRCUIT
WEAK VARIABLE CAPACITOR
D1, D2, D3
WEAK SIGNAL AND WEAK BACKGROUND NOISE IN FM
DEFECTIVE TRANSISTOR. ETC.
VOLTAGE NOT AS SPECIFIED IN "SCHEMATIC DIAGRAM"
POOR Q OR MISALIGNMENT OF COIL
IF (TUNER)
WEAK TRANSISTOR OR WEAK IC
Q1, Q2, Q103, IC101, IC102
WEAK DIODE
D107, D108
MIS ADJUSTMENT OF TRACKING OR IF TRANSFORMERS
REALIGN FOLLOWING THE ALIGNMENT CHART

TROUBLE SHOOTING GUIDE (5)


FM RECEPTION (2)
SYMPTOM
PROBABLE CAUSE
TROUBLE SHOOTING HINT
DISTORTION IN FM
DEFECTIVE IS STAGE OR LOW VOLTAGE IN IF STAGE
MEASURE VOLTAGES IN FM SECTION AND REPAIR OR REPLACE DEFECTIVE PART
DEFECTIVE AGC
D101, D102
MISALIGNMENT
T104
WEAK INTEGRATED CIRCUIT
IC201, IC301
HUM
RIPPLE IN FM POWER SUPPLY
CAPACITOR OFF VALUE
C802, C803
NOISY
NOISY ALL MODES OF OPERATION
SEE "NOISY" IN CHART FOR "ALL MODES"
DEFECTIVE FM IF STAGE OR FM TUNER
VOLTAGE NOT AS SPECIFIED IN "SCHEMATIC DIAGRAM"
AGING OR WEAK IC
IC201, IC301
DIAL CALIBRATION OFF
POINTER DOES NOT MOVE SMOOTHLY
POINTER OFF OF TRACK OR HITS OBSTRUCTION
POINTER RUNS OVER DIAL SCALE
POINTER DOES NOT START AT ZERO POINT OF DIAL
MECHANICALLY RESET POINTER AT ZERO
DIAL CALIBRATION OFF AT PRE-SETTERS ALSO
RE TRACKING OFF
REALIGNING USING ALIGNMENT CHART FOR TRACKING

TROUBLE SHOOTING GUIDE (6)


FM MPX RECEPTION
SYMPTOM
PROBABLE CAUSE
TROUBLE SHOOTING HINT
NO STEREO SEPARATION
STEREO LIGHT OPERATES NORMALLY
COMPONENTS IN ONE CHANNEL PHYSICALLY TOUCHING PARTS FOR OTHER CHANNEL IN TONE CIRCUIT MAIN AMP OR MAX CIRCUIT
STEREO LIGHT DOES NOT LIGHT WHEN RECEIVING STEREO SIGNAL
AGING OR WEAK IC OR TRANSISTOR
IC201
AGING OR WEAK VARIABLE RESISTOR
VR202
AGING OR WEAK CAPACITOR
C209
DISTORTION
WEAK OR DEFECTIVE IC
IC201
STEREO LIGHT DOES NOT OPERATE
MPX AMPLIFIER CHECKS OK
DEFECTIVE INDICATOR LAMP
PL909
DEFECTIVE POWER CIRCUIT TO STEREO LIGHT
R801, R802
USING WITH EXTERNAL INPUTS OR OUTPUTS (TAPE, ETC.)
SYMPTOM
PROBABLE CAUSE
TROUBLE SHOOTING HINT
NO SOUND
UNIT OPERATES PROPERLY ON AM OR FM
INPUT SOURCE DEFECTIVE
SWITCH INPUT SOURCES TO CHECK
LOOSE CONTACT ON SELECTOR SWITCH
SW401
LOOSE CONTACTS OF INPUT TERMINAL, DIN SOCKET
BROKEN LEAD BETWEEN PRINTED CIRCUIT BOARD AND TERMINALS
CHECK AND REPAIR
TAPE PLAY DOES NOT WORK
AMPLIFIER IS OK
TAPE RECORDER DEFECTIVE
LOOSE CONTACT OF OUTPUT DIN SOCKET

IC301(RH-IX0428AGZZ)

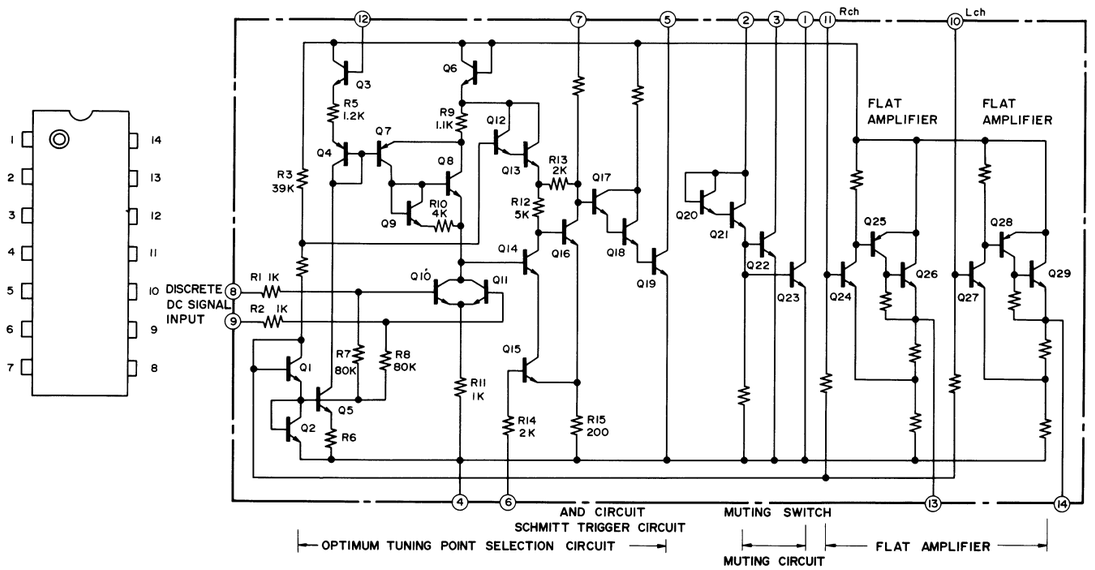


Figure 20

IC501, IC701(RH-IX0427AGZZ)

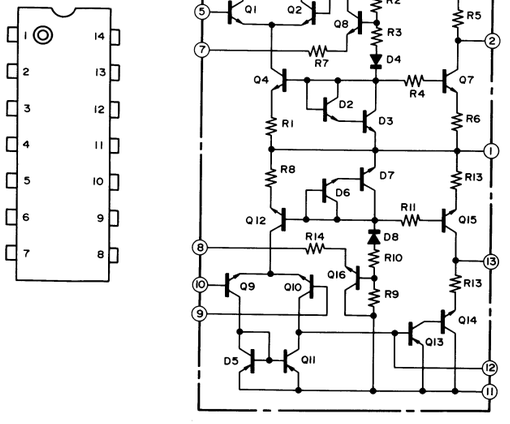


Figure 21

IC101(RH-IX0430AGZZ)

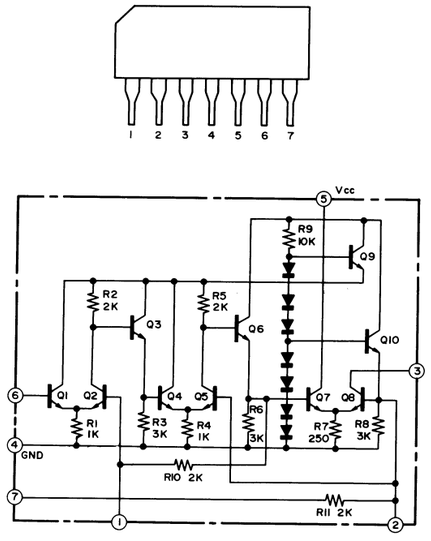
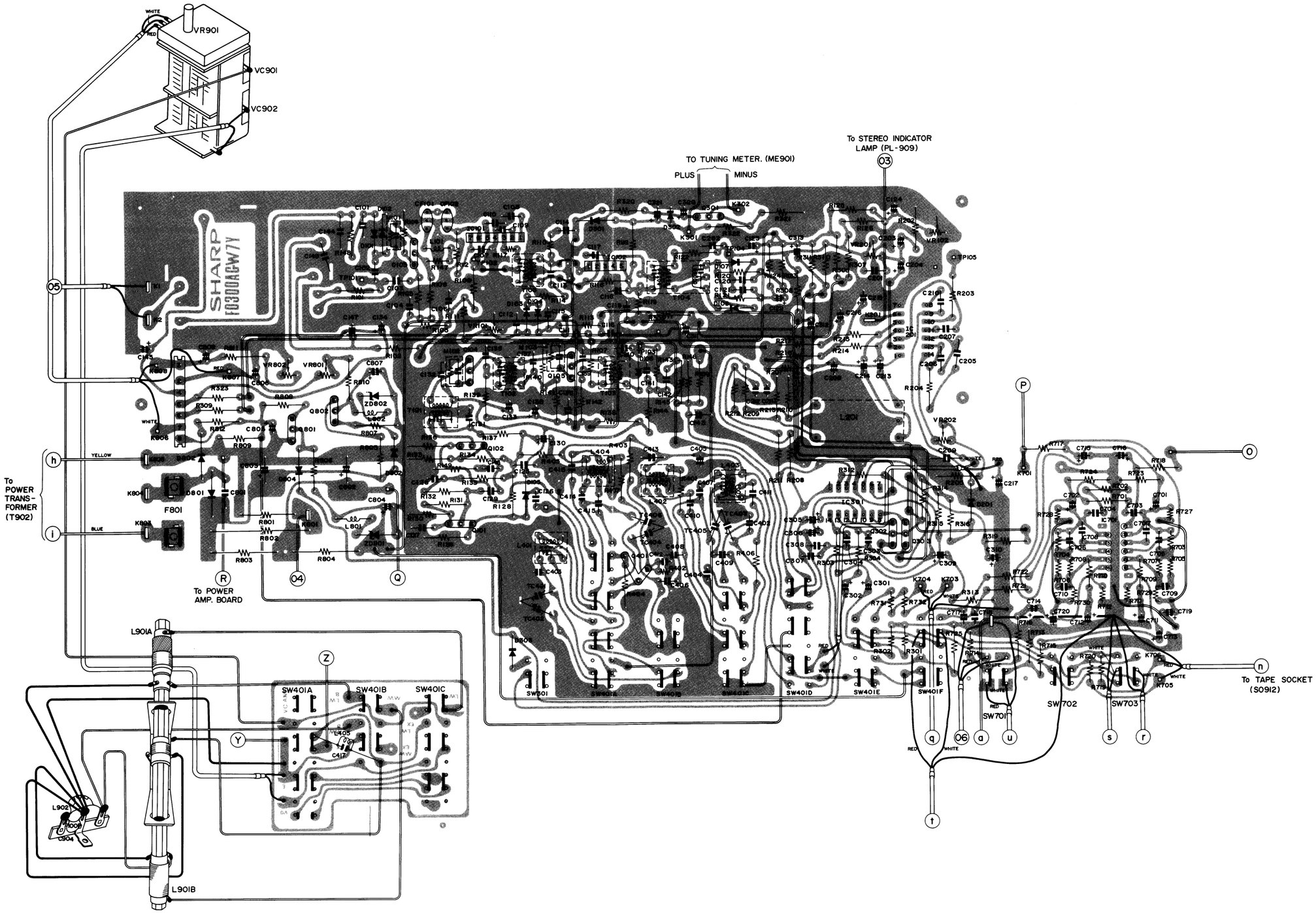


Figure 22


VR901
VC901
VC902
WHITE
RED
SHARP
F0300AGW7Y
TO TUNING METER. (ME901)
PLUS
MINUS
To STEREO INDICATOR LAMP (PL-909)
To POWER TRANS-FORMER (T902)
YELLOW
BLUE
F801
To POWER AMP. BOARD
L901A
L901B
SW401A
SW401B
SW401C
SW401D
SW401E
SW401F
SW701
SW702
SW703
To TAPE SOCKET (S0912)
L902
L405
C417
C304
L301
L302
L303
L304
L305
L306
L307
L308
L309
L310
L311
L312
L313
L314
L315
L316
L317
L318
L319
L320
L321
L322
L323
L324
L325
L326
L327
L328
L329
L330
L331
L332
L333
L334
L335
L336
L337
L338
L339
L340

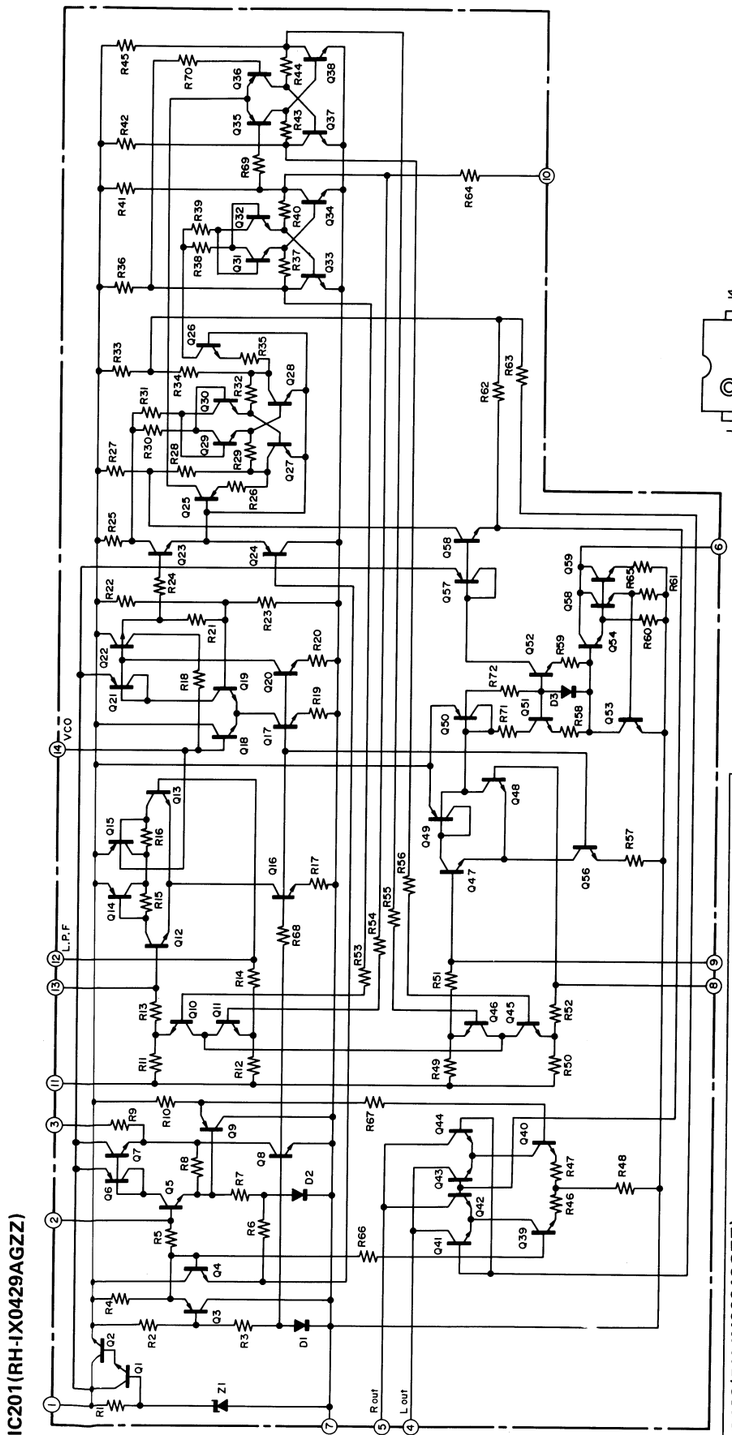


Figure 23

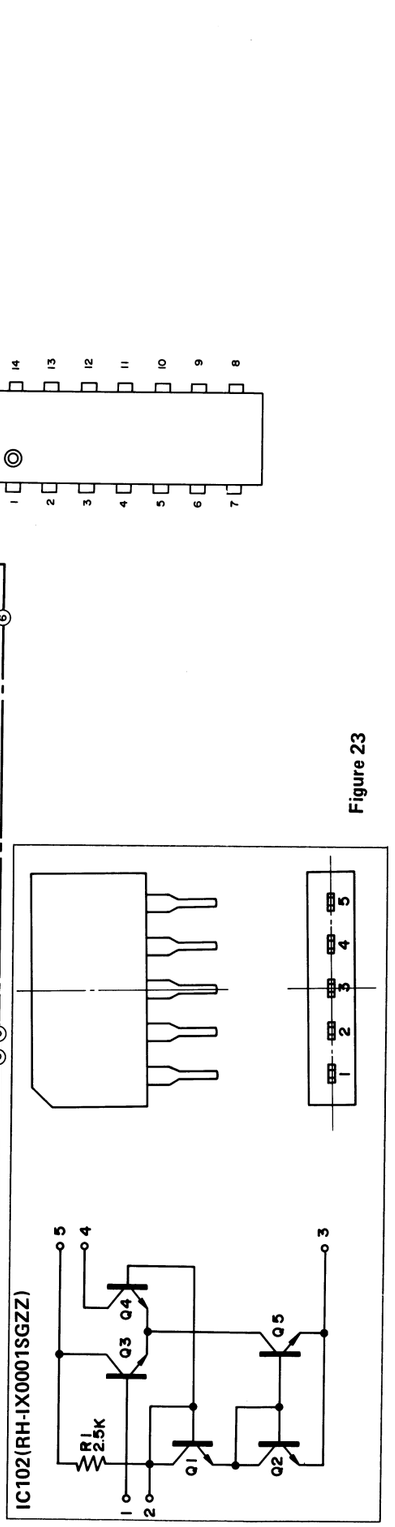


Figure 24

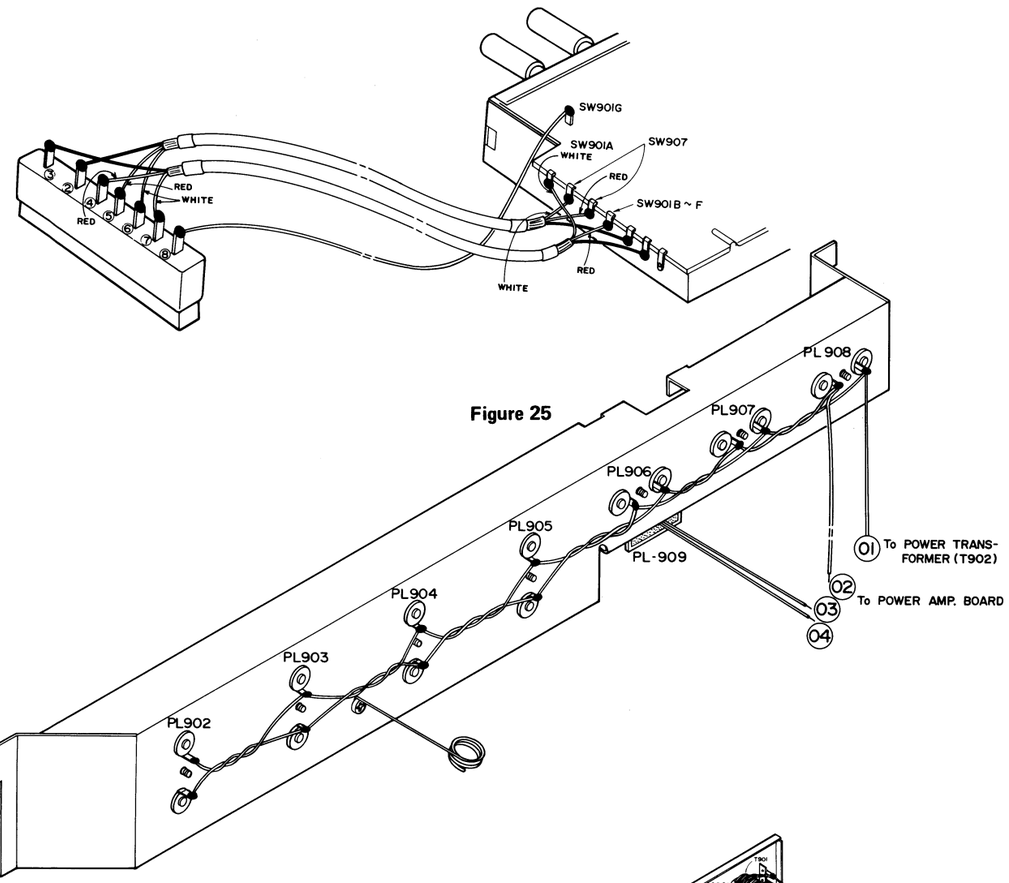


Figure 25

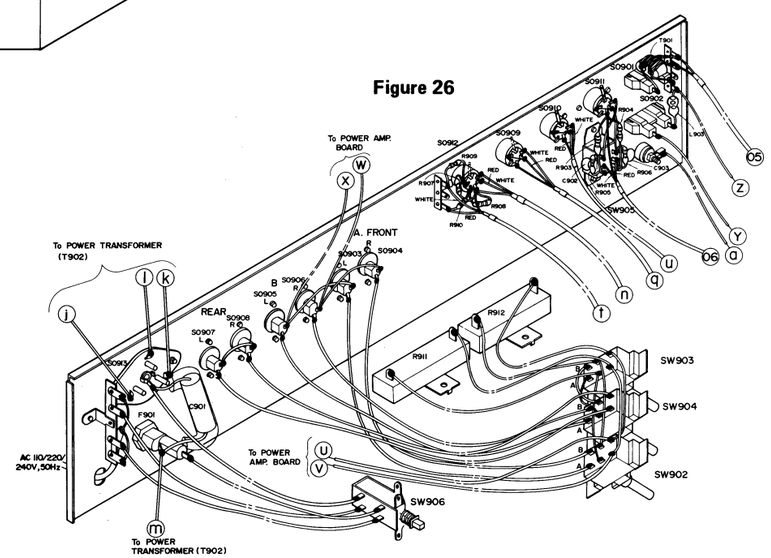
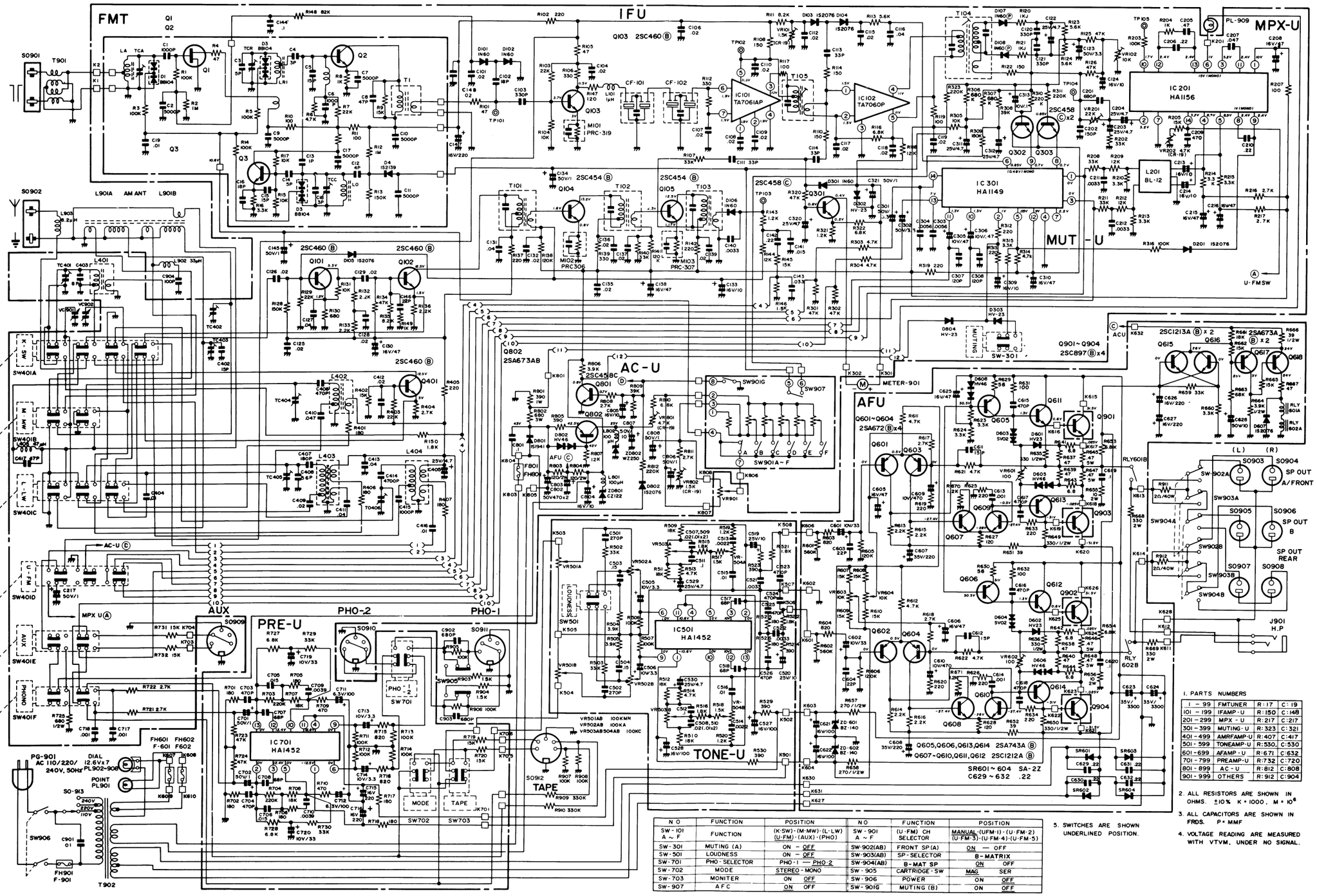


Figure 26

Figure 27



NO	FUNCTION	POSITION	NO	FUNCTION	POSITION
SW-101 A ~ F	FUNCTION	(K-SW)-(M-MW)-(L-LW) (U-FM)-(AUX)-(PHO)	SW-901 A ~ F	(U-FM) CH SELECTOR	MANUAL-(UFM-1)-(U-FM-2) (U-FM-3)-(U-FM-4)-(U-FM-5)
SW-301	MUTING (A)	ON — OFF	SW-902(AB)	FRONT SP(A)	ON — OFF
SW-501	LOUDNESS	ON — OFF	SW-903(AB)	SP-SELECTOR	B-MATRIX
SW-701	PHO-SELECTOR	PHO-1 — PHO-2	SW-904(AB)	B-MAT SP	ON OFF
SW-702	MODE	STEREO - MONO	SW-905	CARTRIDGE-SW	MAG SER
SW-703	MONITER	ON OFF	SW-906	POWER	ON OFF
SW-907	AFC	ON OFF	SW-901G	MUTING (B)	ON OFF

5. SWITCHES ARE SHOWN UNDERLINED POSITION.

1. PARTS NUMBERS

1 ~ 99	FMTUNER	R:17	C:19
101 ~ 199	IFAMP-U	R:150	C:148
201 ~ 299	MPX - U	R:217	C:217
301 ~ 399	MUTING-U	R:323	C:321
401 ~ 499	AMRFAMP-U	R:407	C:417
501 ~ 599	TONEAMP-U	R:530,	C:530
601 ~ 699	AFAMP - U	R:671	C:632
701 ~ 799	PREAMP-U	R:732	C:720
801 ~ 899	AC - U	R:812	C:808
901 ~ 999	OTHERS	R:912	C:904

2. ALL RESISTORS ARE SHOWN IN OHMS. ±10% K=1000, M=10^6
3. ALL CAPACITORS ARE SHOWN IN FRDS. P=MMF
4. VOLTAGE READING ARE MEASURED WITH VTVM, UNDER NO SIGNAL.

Figure 31 SCHEMATIC DIAGRAM

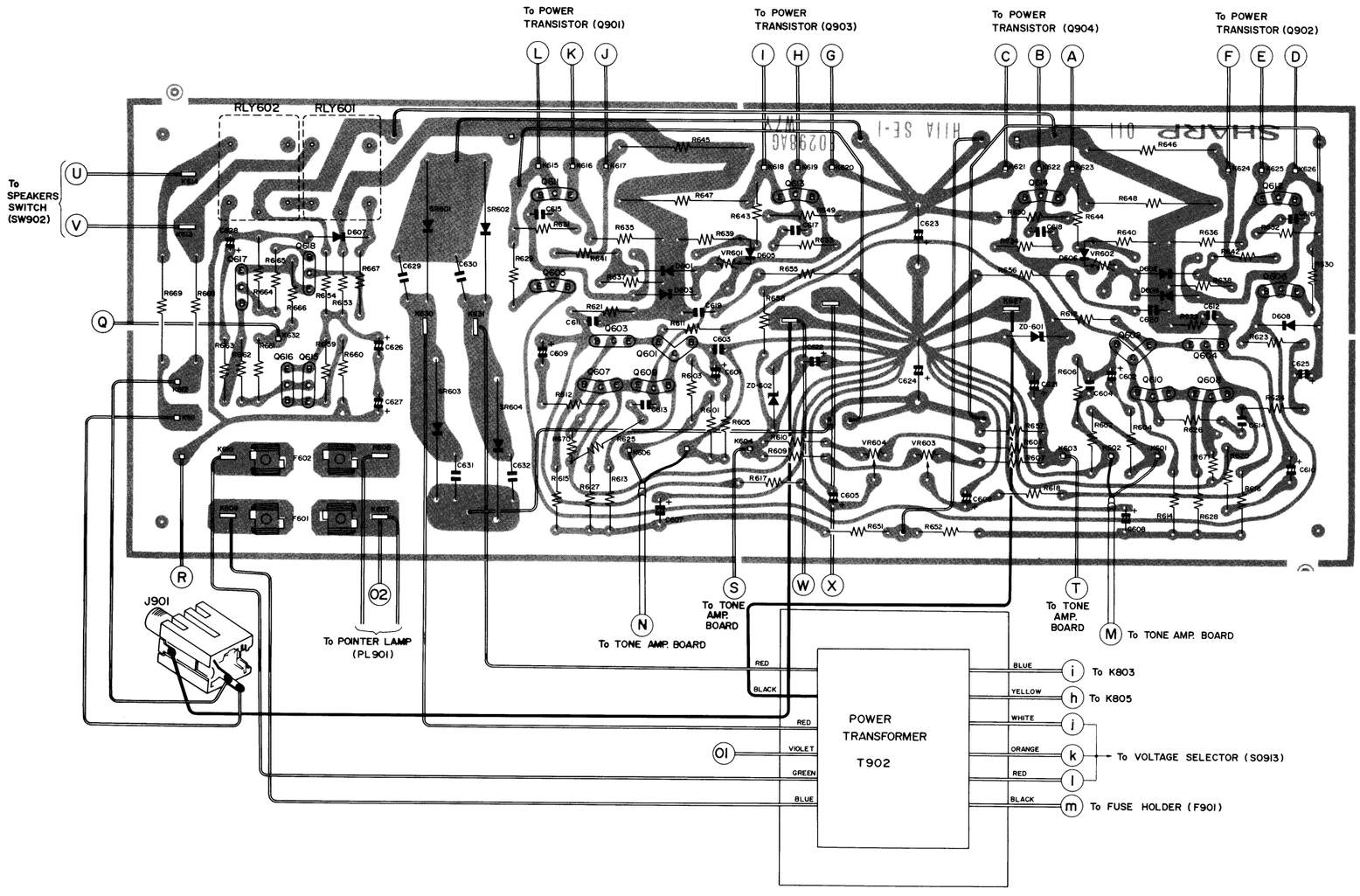


Figure 29 POWER AMP. BOARD WIRING SIDE

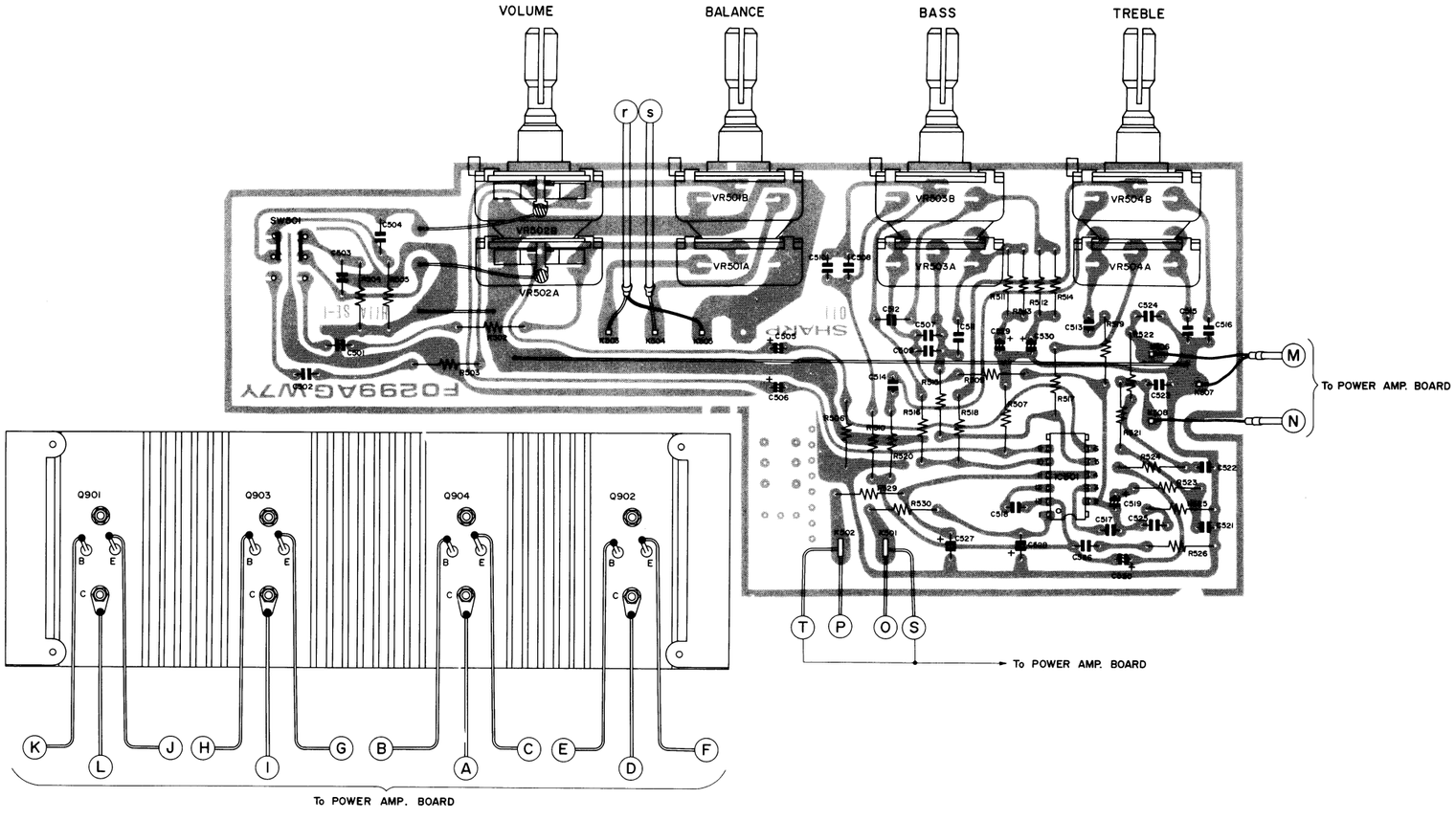


Figure 30 TONE CONTROL AMP. BOARD WIRING SIDE

FM TUNER UNIT ASSEMBLY PARTS
(DUNTF0025AG01)

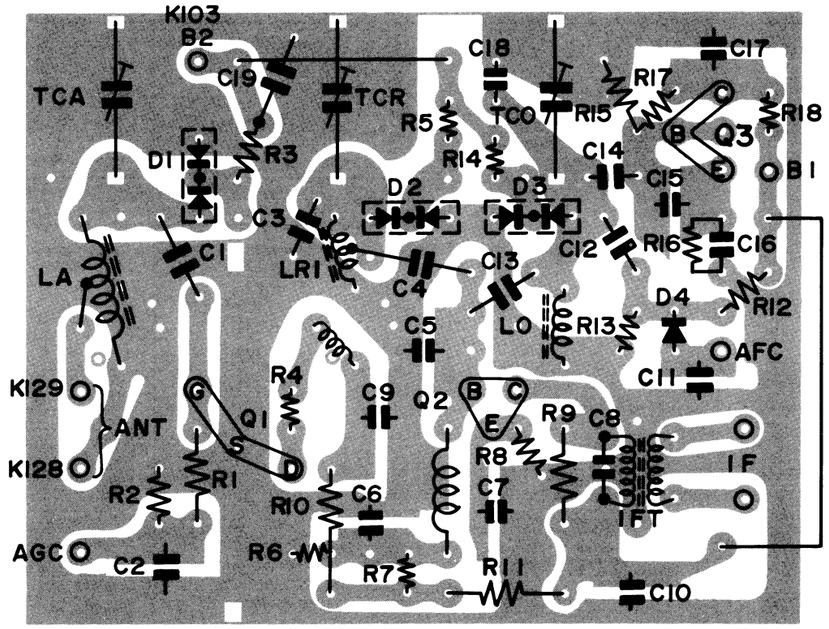


Figure 32

PARTS LIST

MODEL
SA-607H

"HOW TO ORDER REPLACEMENT PARTS"
To have your order filled promptly and correctly, please furnish the following informations.
1. MODEL NUMBER 2. REF. NO.
3. PART NO. 4. DESCRIPTION

MODEL SA-607H

CAPACITORS

REF. NO.	PART NO.	DESCRIPTION
C101	VCKZPU1EF203Z	.02MFD, 25V, +80 −20%, Discap
C102	VCCSPU1HL180K	18PF, 50V, ±10%, Discap
C103	VCCSPU1HL331K	330PF, 50V, ±10%, Discap
C104	VCKZPU1EF203Z	.02MFD, 25V, +80 −20%, Discap
C106	VCKZPU1EF203Z	.02MFD, 25V, +80 −20%, Discap
C107	VCKZPU1EF203Z	.02MFD, 25V, +80 −20%, Discap
C108	VCKZPU1EF203Z	.02MFD, 25V, +80 −20%, Discap
C109	VCKZPU1EF203Z	.02MFD, 25V, +80 −20%, Discap
C110	VCKZPU1EF203Z	.02MFD, 25V, +80 −20%, Discap
C111	VCCSPU1HL330K	33PF, 50V, ±10%, Discap
C112	VCKZPU1EF203Z	.02MFD, 25V, +80 − 20%, Discap
C113	VCCSPU1HL330K	33PF, 50V, ±10%, Discap
C114	VCCSPU1HL330K	33PF, 50V, ±10%, Discap
C115	VCKZPU1EF203Z	.02MFD, 25V, +80 −20%, Discap
C116	VCKZPU1EF403Z	.04MFD, 25V, +80 −20%, Discap
C117	VCKZPU1EF203Z	.02MFD, 25V, +80 −20%, Discap
C118	VCKZPU1EF203Z	.02MFD, 25V, +80 −20%, Discap
C119	VCKZPU1EF203Z	.02MFD, 25V, +80 −20%, Discap
C120	VCCSPU1HL331K	330PF, 50V, ±10%, Discap
C121	VCCSPU1HL331K	330PF, 50V, ±10%, Discap
C122	VCEAAU1EW475R	4.7MFD, 25V, +150 −10%, Electrolytic
C123	VCEAAU1HW335R	3.3MFD, 50V, +150 −10%, Electrolytic
C124	VCEAAU1CW106Q	10MFD, 16V, +100 −10%, Electrolytic
C125	VCKZPU1EF203Z	.02MFD, 25V, +80 −20%, Discap
C126	VCKZPU1EF203Z	.02MFD, 25V, +80 −20%, Discap
C127	VCKZPU1EF403Z	.04MFD, 25V, +80 −20%, Discap
C128	VCKZPU1EF203Z	.02MFD, 25V, +80 −20%, Discap
C129	VCKZPU1EF203Z	.02MFD, 25V, +80 −20%, Discap
C130	VCEAAU1CW476Q	47MFD, 16V, +100 −10%, Electrolytic
C131	VCKZPU1EF403Z	.04MFD, 25V, +80 −20%, Discap

REF. NO.	PART NO.	DESCRIPTION
C132	VCKZPU1EF203Z	.02MFD, 25V, +80 −20%, Discap
C133	VCEAAU1CW106Q	10MFD, 16V, +100 −10%, Electrolytic
C134	VCEAAU1HW105R	1MFD, 50V, +150 −10%, Electrolytic
C135	VCKZPU1EF203Z	.02MFD, 25V, +80 −20%, Discap
C136	VCKZPU1EF203Z	.02MFD, 25V, +80 −20%, Discap
C137	VCKZPU1EF203Z	.02MFD, 25V, +80 −20%, Discap
C138	VCEAAU1CW476Q	47MFD, 16V, +100−10%, Electrolytic
C139	VCKZPU1EF203Z	.02MFD, 25V, +80 −20%, Discap
C140	VCQYKU1HM332K	.0033MFD, 50V, ±10%, Mylar
C141	VCQYKU1HM153M	.015MFD, 50V, ±20%, Mylar
C142	VCKZPU1ND224M	.22MFD, 12V, ±20%, Discap
C143	VCQYKU1HM333K	.033MFD, 50V, ±10%, Mylar
C144	VCKZPU1ND104M	.1MFD, 12V, ±20%, Discap
C145	VCEAAU1HW105R	1MFD, 50V, +150 −10%, Electrolytic
C146	VCCSPU1HL220K	22PF, 50V, ±10%, Discap
C147	VCEAAU1CW227Q	220MFD, 16V, +100 −10%, Electrolytic
C148	VCKZPU1EF203Z	.02MFD, 25V, +80 −20%, Discap
C201	VCCSPU1HL681K	680PF, 50V, ±10%, Discap
C202	VCCSPU1HL151K	150PF, 50V, ±10%, Discap
C203	VCEAAU1EW475R	4.7MFD, 25V, +150 −10%, Electrolytic
C204	VCEAAU1EW475R	4.7MFD, 25V, +150 −10%, Electrolytic
C205	VCKZPU1ND474M	.47MFD, 12V, ±20%, Discap
C206	VCKZPU1ND224M	.22MFD, 12V, ±20%, Discap
C207	VCQYKU1HM473K	.047MFD, 50V, ±10%, Mylar
C208	VCEAAU1CW476Q	47MFD, 16V, +100 −10%, Electrolytic
C209	VCQSMT1HS471J	470PF, 50V, ±5%, Styrol
C210	VCKZPU1ND224M	.22MFD, 12V, ±20%, Discap
C211	VCQYKU1HM332J	.0033MFD, 50V, ±5%, Mylar

REF. NO.	PART NO.	DESCRIPTION
C212	VCQYKU1HM332J	.0033MFD, 50V, ±5%, Mylar
C213	VCEAAU1CW106Q	10MFD, 16V, +100 −10%, Electrolytic
C214	VCEAAU1CW106Q	10MFD, 16V, +100 −10%, Electrolytic
C215	VCEAAU1CW476Q	47MFD, 16V, +100 −10%, Electrolytic
C216	VCEAAU1CW476Q	47MFD, 16V, +100 −10%, Electrolytic
C217	VCEAAU1HW105R	1MFD, 50V, +150 −10%, Electrolytic
C301	VCEAAU1HW335R	3.3MFD, 50V, +150 −10%, Electrolytic
C302	VCEAAU1HW335R	3.3MFD, 50V, +150 −10%, Electrolytic
C303	VCQYKU1HM562J	.0056MFD, 50V, ±5%, Mylar
C304	VCQYKU1HM562J	.0056MFD, 50V, ±5%, Mylar
C305	VCAAAU1AB474M	.47MFD, 10V, ±20%, Electrolytic
C306	VCAAAU1AB474M	.47MFD, 10V, ±20%, Electrolytic
C307	VCCSPU1HL121K	120PF, 50V, ±10%, Discap
C308	VCCSPU1HL121K	120PF, 50V, ±10%, Discap
C309	VCEAAU1CW106Q	10MFD, 16V, +100 −10%, Electrolytic
C310	VCEAAU1CW476Q	47MFD, 16V, +100 −10%, Electrolytic
C311	VCEAAU1EW475R	4.7MFD, 25V, +150 −10%, Electrolytic
C312	VCEAAU1EW475R	4.7MFD, 25V, +150 −10%, Electrolytic
C313	VCAAAU1AB104M	.1MFD, 10V, ±20%, Electrolytic
C320	VCEAAU1EW475R	4.7MFD, 25V, +150 −10%, Electrolytic
C321	VCEAAU1HW105R	1MFD, 50V, +150 −10%, Electrolytic
C402	VCCSPU1HL150K	15PF, 50V, ±10%, Discap
C403	VCCSPU1HL8R0C	8PF, 50V, ±0.25PF, Discap
C404	VCQYKU1HM103K	.01MFD, 50V, ±10%, Mylar
C405	VCEAAU1EW475R	4.7MFD, 25V, +150 −10%, Electrolytic
C406	VCCSPU1HL471K	470PF, 50V, ±10%, Discap
C407	VCCSPU1HL181K	180PF, 50V, ±10%, Discap
C408	VCCSPU1HL560K	56PF, 50V, ±10%, Discap
C409	VCKZPU1EF203Z	.02MFD, 25V, +80 −20%, Discap
C410	VCQYKU1HM473K	.047MFD, 50V, ±10%, Mylar
C411	VCKZPU1EF403Z	.04MFD, 25V, +80 −20%, Discap
C412	VCKZPU1EF203Z	.02MFD, 25V, +80 −20%, Discap
C413	VCKZPU1EF403Z	.04MFD, 25V, +80 −20%, Discap
C414	VCQSMT1HS472J	4700PF, 50V, ±5%, Styrol
C415	VCQSMT1HS102J	1000PF, 50V, ±5%, Styrol
C416	VCKZPU1EF103Z	.01MFD, 25V, +80 −20%, Discap
C417	VCCSPU1HL470K	47PF, 50V, ±10%, Discap
C501	VCCSPU1HL271K	270PF, 50V, ±10%, Discap
C502	VCCSPU1HL271K	270PF, 50V, ±10%, Discap
C503	VCQYKU1HM154K	.15MFD, 50V, ±10%, Mylar
C504	VCQYKU1HM154K	.15MFD, 50V, ±10%, Mylar
C505	VCAAAU1AB335M	3.3MFD, 10V, ±20%, Electrolytic
C506	VCAAAU1AB335M	3.3MFD, 10V, ±20%, Electrolytic
C507	VCQYKU1HM103K	.01MFD, 50V, ±10%, Mylar
C508	VCQYKU1HM103K	.01MFD, 50V, ±10%, Mylar
C509	VCQYKU1HM103K	.01MFD, 50V, ±10%, Mylar
C510	VCQYKU1HM103K	.01MFD, 50V, ±10%, Mylar
C511	VCQYKU1HM104K	.1MFD, 50V, ±10%, Mylar
C512	VCQYKU1HM104K	.1MFD, 50V, ±10%, Mylar

REF. NO.	PART NO.	DESCRIPTION
C513	VCQYKU1HM222K	.0022MFD, 50V, ±10%, Mylar
C514	VCQYKU1HM222K	.0022MFD, 50V, ±10%, Mylar
C515	VCQYKU1HM103K	.01MFD, 50V, ±10%, Mylar
C516	VCQYKU1HM103K	.01MFD, 50V, ±10%, Mylar
C517	VCCSPU1HL680K	68PF, 50V, ±10%, Discap
C518	VCCSPU1HL680K	68PF, 50V, ±10%, Discap
C519	VCEAAU1EW106Q	10MFD, 25V, +100 −10%, Electrolytic
C520	VCEAAU1EW106Q	10MFD, 25V, +100 −10%, Electrolytic
C521	VCQYKU1HM332K	.0033MFD, 50V, ±10%, Mylar
C522	VCQYKU1HM332K	.0033MFD, 50V, ±10%, Mylar
C523	VCCSPU1HL471K	470PF, 50V, ±10%, Discap
C524	VCCSPU1HL471K	470PF, 50V, ±10%, Discap
C525	VCCSPU1HL471K	470PF, 50V, ±10%, Discap
C526	VCCSPU1HL471K	470PF, 50V, ±10%, Discap
C527	VCEAAU1CW107Q	100MFD, 16V, +100 −10%, Electrolytic
C528	VCEAAU1CW107Q	100MFD, 16V, +100 −10%, Electrolytic
C529	VCEAAU1EW475R	4.7MFD, 25V, +150 −10%, Electrolytic
C530	VCEAAU1EW475R	4.7MFD, 25V, +150 −10%, Electrolytic
C601	VCEAAU1AW336Q	33MFD, 10V, +100 −10%, Electrolytic
C602	VCEAAU1AW336Q	33MFD, 10V, +100 −10%, Electrolytic
C603	VCCSPU1HL220K	22PF, 50V, ±10%, Discap
C604	VCCSPU1HL220K	22PF, 50V, ±10%, Discap
C605	VCEAAU1CW476Q	47MFD, 16V, +100 −10%, Electrolytic
C606	VCEAAU1CW476Q	47MFD, 16V, +100 −10%, Electrolytic
C607	VCEAAU1VW227Q	220MFD, 35V, +100 −10%, Electrolytic
C608	VCEAAU1VW227Q	220MFD, 35V, +100 −10%, Electrolytic
C609	VCEAAU1AW477Q	470MFD, 10V, +100 −10%, Electrolytic
C610	VCEAAU1AW477Q	470MFD, 10V, +100 −10%, Electrolytic
C611	VCCSPU1HL150K	15PF, 50V, ±10%, Discap
C612	VCCSPU1HL150K	15PF, 50V, ±10%, Discap
C613	VCKYPU1HB102K	.001MFD, 50V, ±10%, Discap
C614	VCKYPU1HB102K	.001MFD, 50V, ±10%, Discap
C615	VCCSPU1HL471K	470PF, 50V, ±10%, Discap
C616	VCCSPU1HL471K	470PF, 50V, ±10%, Discap
C617	VCCSPU1HL471K	470PF, 50V, ±10%, Discap
C618	VCCSPU1HL471K	470PF, 50V, ±10%, Discap
C619	VCQYKU1HM104K	.1MFD, 50V, ±10%, Mylar
C620	VCQYKU1HM104K	.1MFD, 50V, ±10%, Mylar
C621	VCEAAU1CW107Q	100MFD, 16V, +100 −10%, Electrolytic
C622	VCEAAU1CW107Q	100MFD, 16V, +100 −10% Electrolytic
C623	VCEAAU1VW338Q	3300MFD, 35V, +100 −10%, Electrolytic
C624	VCEAAU1VW338Q	3300MFD, 35V, +100 −10%, Electrolytic
C625	VCEAAU1CW476Q	47MFD, 16V, +100 −10%, Electrolytic

MODEL SA-607H

SHARP

PARTS LIST

REF. NO.	PART NO.	DESCRIPTION
C626	VCEAAU1CW227Q	220MFD, 16V, +100 −10%, Electrolytic
C627	VCEAAU1CW227Q	220MFD, 16V, +100 −10%, Electrolytic
C628	VCEAAU1HW106Q	10MFD, 50V, +100 −10%, Electrolytic
C629	VCQYKU1HM224K	.22MFD, 50V, ±10%, Mylar
C630	VCQYKU1HM224K	.22MFD, 50V, ±10%, Mylar
C631	VCQYKU1HM224K	.22MFD, 50V, ±10%, Mylar
C632	VCQYKU1HM224K	.22MFD, 50V, ±10%, Mylar
C701	VCEAAU1HW105R	1MFD, 50V, +150 −10%, Electrolytic
C702	VCEAAU1HW105R	1MFD, 50V, +150 −10%, Electrolytic
C703	VCCSPU1HL471K	470PF, 50V, ±10%, Discap
C704	VCCSPU1HL471K	470PF, 50V, ±10%, Discap
C705	VCQYKU1HM153K	.015MFD, 50V, ±10%, Mylar
C706	VCQYKU1HM153K	.015MFD, 50V, ±10%, Mylar
C707	VCCSPU1HL680K	68PF, 50V, ±10%, Discap
C708	VCCSPU1HL680K	68PF, 50V, ±10%, Discap
C709	VCQYKU1HM392K	.0039MFD, 50V, ±10%, Mylar
C710	VCQYKU1HM392K	.0039MFD, 50V, ±10%, Mylar
C711	VCEAAU0XW107Q	100MFD, 6.3V, +100 −10%, Electrolytic
C712	VCEAAU0XW107Q	100MFD, 6.3V, +100 −10%, Electrolytic
C713	VCAAAU1AB335M	3.3MFD, 10V, ±20%, Electrolytic
C714	VCAAAU1AB335M	3.3MFD, 10V, ±20%, Electrolytic
C715	VCEAAU1CW227Q	220MFD, 16V, +100 −10%, Electrolytic
C716	VCEAAU1CW227Q	220MFD, 16V, +100 −10%, Electrolytic
C717	VCQYKU1HM102K	.001MFD, 50V, ±10%, Mylar
C718	VCQYKU1HM102K	.001MFD, 50V, ±10%, Mylar
C719	VCEAAU1AW336Q	33MFD, 10V, +100 −10%, Electrolytic
C720	VCEAAU1AW336Q	33MFD, 10V, +100 −10%, Electrolytic
C801	VCQYKU1HM104K	.1MFD, 50V, ±10%, Mylar
C802	VCEAAU1HW477Q	470MFD, 50V, +100 −10%, Electrolytic
C803	VCEAAU1HW477Q	470MFD, 50V, +100 −10%, Electrolytic
C804	VCEAAU1CW106Q	10MFD, 16V, +100 −10%, Electrolytic
C805	VCEAAU1CW106Q	10MFD, 16V, +100 −10%, Electrolytic
C806	VCEAAU1HW105R	1MFD, 50V, +150 −10% Electrolytic
C807	VCEAAU1HW106Q	10MFD, 50V, +100 −10%, Electrolytic
C808	VCEAAU1HW105R	1MFD, 50V, +150 −10%, Electrolytic
C901	RC-KZ088UAGZZ	.01MFD, 500V, Discap
	VCPOAT3AC103M	.01MFD, 1000V, ±20%, Tubular Oil
C902	VCCSPU1HL681K	680PF, 50V, ±10%, Discap
C903		
C904	VCCSPU1HL101K	100PF, 50V, ±10%, Discap
TC401		Trimmer, SW Antenna
TC402		Trimmer, MW Antenna
TC403		Trimmer, LW Antenna

REF. NO.	PART NO.	DESCRIPTION
TC404	RTO-H2033AGZZ	Trimmer, MW Oscillation
TC405		Trimmer, LW Oscillation
TC406		Trimmer, SW Oscillation
VC901	RVC-Z0001AGZZ	Variable Tuning Gang
VC902		

RESISTORS (Unless otherwise specified resistor are 1/4W, ±10%, Carbon type.)

R101	VRD-ST2EY470K	47 ohm
R102	VRD-ST2EY221K	220 ohm
R103	VRD-ST2EY223K	22K ohm
R104	VRD-ST2EY103K	10K ohm
R105	VRD-ST2EY470K	47 ohm
R106	VRD-ST2EY331K	330 ohm
R107	VRD-ST2EY333K	33K ohm
R108	VRD-ST2EY151K	150 ohm
R109	VRD-ST2EY561K	560 ohm
R110	VRD-SU2EY151K	150 ohm
R111	VRD-ST2EY822K	8.2K ohm
R112	VRD-ST2EY331K	330 ohm
R113	VRD-ST2EY562K	5.6K ohm
R114	VRD-ST2EY151K	150 ohm
R115	VRD-ST2EY561K	560 ohm
R116	VRD-ST2EY682K	6.8K ohm
R117	VRD-SU2EY101K	100 ohm
R118	VRD-ST2EY123K	12K ohm
R119	VRD-SU2EY101K	100 ohm
R120	VRD-ST2EY102J	1K ohm, 1/4W, ±5%, Carbon
R121	VRD-ST2EY102J	1K ohm, 1/4W, ±5%, Carbon
R122	VRD-ST2EY151K	150 ohm
R123	VRD-ST2EY562K	5.6K ohm
R124	VRD-ST2EY562K	5.6K ohm
R125	VRD-ST2EY473K	47K ohm
R126	VRD-ST2EY473K	47K ohm
R128	VRD-ST2EY154K	150K ohm
R129	VRD-ST2EY223K	22K ohm
R130	VRD-ST2EY681K	680 ohm
R131	VRD-ST2EY103K	10K ohm
R132	VRD-ST2EY222K	2.2K ohm
R133	VRD-ST2EY222K	2.2K ohm
R134	VRD-ST2EY473K	47K ohm
R135	VRD-ST2EY822K	8.2K ohm
R136	VRD-ST2EY222K	2.2K ohm
R137	VRD-ST2EY221K	220 ohm
R138	VRD-ST2EY124K	120K ohm
R139	VRD-ST2EY331K	330 ohm
R140	VRD-ST2EY333K	33K ohm
R141	VRD-ST2EY124K	120K ohm
R142	VRD-ST2EY221K	220 ohm
R143	VRD-ST2EY122K	1.2K ohm
R144	VRD-ST2EY123K	12K ohm
R145	VRD-ST2EY153K	15K ohm
R146	VRD-ST2EY152K	1.5K ohm
R147	VRD-SU2EY121K	120 ohm
R148	VRD-ST2EY823K	82K ohm
R149	VRD-ST2EY102K	1K ohm
R150	VRD-ST2EY182K	1.8K ohm
R202	VRD-ST2EY333K	33K ohm
R203	VRD-ST2EY104K	100K ohm
R204	VRD-ST2EY102K	1K ohm
R205	VRD-ST2EY153K	15K ohm

REF. NO.	PART NO.	DESCRIPTION
R207	VRD-ST2EY101K	100 ohm
R208	VRD-ST2EY333K	33K ohm
R209	VRD-ST2EY123K	12K ohm
R210	VRD-ST2EY332K	3.3K ohm
R211	VRD-ST2EY333K	33K ohm
R212	VRD-ST2EY123K	12K ohm
R213	VRD-ST2EY332K	3.3K ohm
R214	VRD-ST2EY332K	3.3K ohm
R215	VRD-ST2EY332K	3.3K ohm
R216	VRD-ST2EY272K	2.7K ohm
R217	VRD-ST2EY272K	2.7K ohm
R301	VRD-SU2EY473K	47K ohm
R302	VRD-SU2EY473K	47K ohm
R303	VRD-ST2EY472K	4.7K ohm
R304	VRD-ST2EY472K	4.7K ohm
R305	VRD-ST2EY103K	10K ohm
R306	VRD-ST2EY684K	680K ohm
R307	VRD-ST2EY684K	680K ohm
R308	VRD-ST2EY393K	39K ohm
R309	VRD-ST2EY184K	180K ohm
R310	VRD-ST2EY224K	220K ohm
R311	VRD-ST2EY224K	220K ohm
R312	VRD-ST2EY221K	220 ohm
R313	VRD-ST2EY221K	220 ohm
R314	VRD-ST2EY472K	4.7K ohm
R315	VRD-ST2EY332K	3.3K ohm
R316	VRD-ST2EY104K	100K ohm
R319	VRD-ST2EY221K	220 ohm
R320	VRD-ST2EY473K	47K ohm
R321	VRD-ST2EY122K	1.2K ohm
R322	VRD-ST2EY682K	6.8K ohm
R323	VRD-ST2EY224K	220K ohm
R401	VRD-ST2EY181K	180 ohm
R402	VRD-SU2EY153K	15K ohm
R403	VRD-ST2EY223K	22K ohm
R404	VRD-ST2EY272K	2.7K ohm
R405	VRD-ST2EY221K	220 ohm
R406	VRD-ST2EY181K	180 ohm
R407	VRD-ST2EY181K	180 ohm
R502, R503	VRD-ST2EY333K	33K ohm
R504, R505	VRD-ST2EY392K	3.9K ohm
R506, R507	VRD-ST2EY104K	100K ohm
R509, R510	VRD-ST2EY183K	18K ohm
R511, R512	VRD-ST2EY183K	18K ohm
R513, R514	VRD-ST2EY472K	4.7K ohm
R515, R516	VRD-ST2EY182K	1.8K ohm
R517, R518	VRD-ST2EY152K	1.5K ohm
R519, R520	VRD-ST2EY122K	1.2K ohm
R521, R522	VRD-ST2EY182K	1.8K ohm
R523, R524	VRD-ST2EY391K	390 ohm
R525, R526	VRD-ST2EY181K	180 ohm

REF. NO.	PART NO.	DESCRIPTION
R527, R528	VRD-ST2EY182K	1.8K ohm
R529, R530	VRD-ST2EY391K	390 ohm
R601, R602	VRD-ST2EY564K	560K ohm
R603, R604	VRD-ST2EY821K	820 ohm
R605, R606	VRD-ST2EY124K	120K ohm
R607, R608	VRD-ST2EY153K	15K ohm
R609, R610	VRD-ST2EY153K	15K ohm
R611, R612	VRD-ST2EY472K	4.7K ohm
R613, R614	VRD-ST2EY222K	2.2K ohm
R615, R616	VRD-ST2EY222K	2.2K ohm
R617, R618	VRD-ST2EY272K	2.7K ohm
R619, R620	VRD-ST2EY221K	220 ohm
R621, R622	VRD-ST2EY472K	4.7K ohm
R623, R624	VRD-ST2EY332K	3.3K ohm
R625, R626	VRD-ST2EY221K	220 ohm
R627, R628	VRD-ST2EY121K	120 ohm
R629, R630	VRD-ST2EY560K	56 ohm
R631, R632	VRD-ST2EY101K	100 ohm
R633, R634	VRD-ST2EY221K	220 ohm
R635, R636	VRC-MT2HG331K	330 ohm, 1/2W, ±10%, Carbon
R637, R638	VRD-ST2EY470K	47 ohm
R639, R640	VRD-ST2EY470K	47 ohm
R641, R642	VRD-ST2EY6R8K	6.8 ohm
R643, R644	VRD-ST2EY6R8K	6.8 ohm
R645, R646	VRW-KT3HDR47K	.47 ohm, 5W, ±10%, Wire
R647, R648	VRW-KT3HDR47K	.47 ohm, 5W, ±10%, Wire
R649, R650	VRC-MT2HG331K	330 ohm, 1/2W, ±10%, Carbon
R651, R652	VRD-ST2EY390K	39 ohm
R653, R654	VRD-ST2EY682K	6.8K ohm
R655, R656	VRS-PT3DB100K	10 ohm, 2W, ±10%, Oxide Film
R657, R658	VRC-MT2HG271K	270 ohm, 1/2W, ±10%, Carbon
R659	VRD-ST2EY333K	33K ohm

SHARP

PARTS LIST

MODEL
SA-607H

REF. NO.	PART NO.	DESCRIPTION
R660	VRD-ST2EY332K	3.3K ohm
R661	VRD-ST2EY183K	18K ohm
R662	VRD-ST2EY153K	15K ohm
R663	VRD-ST2EY683K	68K ohm
R664	VRC-MT2HG392K	3.9K ohm, 1/2W, ±10%, Carbon
R665	VRD-ST2EY153K	15K ohm
R666	VRC-MT2HG390K	39 ohm, 1/2W, ±10%, Carbon
R667	VRD-ST2EY470K	47 ohm
R668	VRS-PT3DB331K	330 ohm, 2W, ±10%, Oxide Film
R669	VRS-PT3DB331K	330 ohm, 2W, ±10%, Oxide Film
R670, R671	VRD-SU2EY122K	1.2K ohm
R701, R702	VRD-ST2EY181K	180 ohm
R703, R704	VRD-SU2EY224K	220K ohm
R705, R706	VRD-SU2EY181K	180 ohm
R707, R708	VRD-SU2EY183K	18K ohm
R709, R710	VRD-SU2EY471K	470 ohm
R711, R712	VRD-SU2EY104K	100K ohm
R713, R714	VRD-SU2EY104K	100K ohm
R715	VRD-SU2EY821K	820 ohm
R716	VRD-ST2EY821K	
R717, R718	VRD-ST2EY181K	180 ohm
R719, R720	VRD-SU2EY153K	15K ohm
R721, R722	VRD-ST2EY272K	2.7K ohm
R723, R724	VRD-ST2EY473K	47K ohm
R725	VRC-MT2HG681K	680 ohm, 1/2W, ±10%, Carbon
R727, R728	VRD-SU2EY682K	6.8K ohm
R729, R730	VRD-SU2EY333K	33K ohm
R731, R732	VRD-SU2EY153K	15K ohm
R801	VRS-PT3AB391K	390 ohm, 1W, ±10%, Oxide Film
R802	VRS-PT3LB681K	680 ohm, 3W, ±10%, Oxide Film
R803	VRS-PT3DB121K	120 ohm, 2W, ±10%, Oxide Film
R804	VRS-PT3DB121K	120 ohm, 2W, ±10%, Oxide Film
R805	VRD-ST2EY391K	390 ohm
R806	VRD-ST2EY392K	3.9K ohm
R807	VRD-ST2EY123K	12K ohm
R808	VRD-ST2EY272K	2.7K ohm
R809	VRD-ST2EY393K	39K ohm
R810	VRD-ST2EY682K	6.8K ohm
R811	VRD-ST2EY272K	2.7K ohm
R812	VRD-ST2EY224K	220K ohm
R903, R904	VRD-ST2EY152K	1.5K ohm
R905, R906	VRD-ST2EY104K	100K ohm
R907, R908	VRD-ST2EY104K	100K ohm
R909, R910	VRD-ST2EY334K	330K ohm

REF. NO.	PART NO.	DESCRIPTION
R911, R912	VRW-CL4GG2R0K	2 ohm, 40W, ±10%, Cement

DIODES

D101	VHD1N60////-1	FM AGC
D102	VHD1N60////-1	FM AGC
D103	VHD1S2076//-1	FM Muting
D104	VHD1S2076//-1	FM Muting
D105	VHD1S2076//-1	AM AGC
D106	VHD1N60////-1	AM Detector
D107, D108	VHD1N60////-3	FM Detector
D201	VHD1S2076//-1	Voltage Control
D301	VHD1N60////-1	Tuning Meter
D302	VHVHV23G-B/-1	Tuning Meter
D303	VHVHV23G-B/-1	Back Current Prevention
D601, D602	VHVHV23G-B/-1	Decrease Voltage Compensation
D603, D604	RH-DX0010SEZZ	Decrease Voltage Compensation
D605, D606	VHVHV46-G//-1	Decrease Voltage Compensation
D607	VHD1S2076//-1	Surge Current Prevention
D608	VHVHV46-G//-1	Constant Current
D801	VHD1S1941//-1	Rectifier
D802	VHVHV46-G//-1	Constant Current
D803	VHD1S2076//-1	Rectifier
D804	VHVHV23G-B/-1	Voltage Reduction
ZD601, ZD602	VHEBZ140///-1	Voltage Regulator
ZD801	VHECZ-122//1G	Voltage Regulator
ZD802	VHEWZ250///-1	Voltage Regulator
SR601, SR602, SR603, SR604	RH-DX0001SEZZ	Rectifier

TRANSISTORS

Q101	VS2SC460-B/-1	AM RF
Q102	VS2SC460-B/-1	AM Mixer
Q103	VS2SC460-B/-1	FM1st IF
Q104	VS2SC454-B/-1	AM 1st IF
Q105	VS2SC454-B/-1	AM 2nd IF
Q301	VS2SC458-C/-1	Tuning Meter Amp.
Q302	VS2SC458-C/-1	Operation Stabilizer
Q303	VS2SC458-C/-1	Operation Stabilizer
Q401	VS2SC460-B/-1	AM Local Oscillator
Q601, Q602	VS2SA672-B/-1	Differential 1st Amp.
Q603, Q604	VS2SA672-B/-1	Differential 1st Amp.
Q605, Q606	VS2SA743AB/-4	Constant Current
Q607, Q608	VS2SC1212WAB4	Differential 2nd Amp.
Q609, Q610	VS2SC1212WAB4	Differential 2nd Amp.
Q611, Q612	VS2SC1212WAB4	3rd Amp.

REF. NO.	PART NO.	DESCRIPTION
Q613, Q614	VS2SA743AB/-4	3rd Amp.
Q615, Q616	VS2SC1213AB-1	Circuit Protection
Q617	VS2SA673AB/-1	Circuit Protection
Q618	VS2SA673AB/-1	Circuit Protection
Q801	VS2SC458-C/-1	Ripple Filter
Q802	VS2SA673AB/-1	Ripple Filter
Q901, Q902	VS2SC897-B/-1	Power Amp.
Q903, Q904	VS2SC897-B/-1	Power Amp.

COILS

L101	VP-LH1R0M0000	Choke
L201	RFILL0001AGZZ	Low Pass Filter
L401	RCILA0052AGZZ	SW Antenna
L402	RCILB0070AGZZ	MW Oscillation
L403	RCILB0069AGZZ	LW Oscillation
L404	RCILB0038AGZZ	SW Oscillation
L405	VP-LH470M0000	3.3MHz Trap
L801	VP-LH101K0000	Noise Filter, 100μH
L802	VP-LH101K0000	Noise Filter, 100μH
L901A,B	RCILA0070AGZZ	MW/LW Antenna
L902	VP-LH330M0000	3.3MHz Trap, 33μH
L903	VP-LH8R2M0000	Matching

TRANSFORMERS

T101	RCILI0027SEZZ	AM 1st IF
T102	RCILI0012AGZZ	AM 2nd IF
T103	RCILI0008SEZZ	AM 3rd IF
T104	RCILD0002AGZZ	FM Discriminator
T105	RCILD0004SEZZ	FM 3rd IF
T901	RCILA0231AFZZ	Impedance Converter
T902	RTRNP0292AGZZ	Power

CERAMIC FILTERS

CF101	RFILF0001AGZZ	FM 1st IF
CF102	RFILF0001AGZZ	FM 2nd IF

CONTROLS

VR101	RVR-M0067AGZZ	1.5K ohm, Muting Level Adjust
VR102	RVR-B0057AGZZ	10K ohm, Muting Width Adjust
VR201	RVR-M0057AGZZ	22K ohm, Separation Adjust
VR202	RVR-M0065AGZZ	4.7K ohm, FM Stereo Indicator Adjust
VR501 A, B	RVR-G0001AGZZ	Balance
VR502 A, B	RVR-A0065AGZZ	Volume
VR503 A, B	RVR-C0019AGZZ	Bass
VR504 A, B	RVR-C0019AGZZ	Treble

REF. NO.	PART NO.	DESCRIPTION
VR601, VR602	RVR-M0068AGZZ	100 ohm, Idle Current Adjust
VR603, VR604	RVR-B0052AGZZ	10K ohm, Zero Voltage Adjust
VR801	RVR-M0065AGZZ	4.7K ohm, Frequency Cover (Low) Adjust
VR802	RVR-M0067AGZZ	1.5K ohm, Frequency Cover (High) Adjust
VR901	RVC-Z0001AGZZ	Variable Tuning Gang

PACKAGED CIRCUIT

M101	RMPTA0025AFZZ	
M102	RMPTA0014AFZZ	
M103	RMPTA0015AFZZ	

INTEGRATED CIRCUIT

IC101	RH-IX0430AGZZ	IF Amp.
IC102	RH-IX0001SGZZ	IF Amp.
IC201	RH-IX0429AGZZ	FM Stereo Decorder
IC301	RH-IX0428AGZZ	Muting Judge Circuit
IC501	RH-IX0427AGZZ	Tone Amp
IC701	RH-IX0427AGZZ	Equalizer Amp

MISCELLANEOUS (1)

	QFS-C312AAGNI	Fuse, 3.15A
	QFS-D162AAGNI	Fuse, 1.6A
	QFS-C322CAGNI	Fuse, 3.15AT Ⓢ (SEMKO)
	QFS-C162AAGNI	Fuse, 1.6AT Ⓢ (SEMKO)
	QFS-C501BAGNI	Fuse, 500mAT Ⓢ (SEMKO)
SW301	QSW-P0058AGZZ	Switch, Muting
SW401 A ~ F	QSW-P0058AGZZ	Switch, Program Selector
SW501	QSW-P0059AGZZ	Switch, Loudness
SW701	QSW-P0058AGZZ	Switch, Phono Selector
SW702	QSW-P0058AGZZ	Switch, Mode Selector
SW703	QSW-P0058AGZZ	Switch, Tape Monitor
SW901 A ~ F	RVR-Z0039AGZZ	Switch, Pre-setting
SW901G		Switch, Muting, Pre-setting
SW902 A, B	QSW-B0030AGZZ	Switch, Speaker, Front
SW903 A, B	QSW-B0030AGZZ	Switch, Speaker Selector
SW904 A, B	QSW-B0030AGZZ	Switch, Speaker, Rear
SW905	QSW-S0044AGZZ	Switch, Cartridge Selector
SW906	QSW-P0037AGZZ	Switch, Power
SW907	Parts of SW901	Switch, AFC
	LANGK0112AGZZ	Bracket, Pulley (Two)
	NPLYB0003AGZZ	Pulley, Dial Stringing
	NSFTZ0024AGFW	Shaft, Dial Stringing
	LANGR0300AGZZ	Bracket, Control
	LRALM0021AGFD	Rail, Pointer
	LX-WZ0011AGFE	Washer, Tuning Shaft
	NSFTD0044AGFW	Shaft, Tuning
	PSPAN0004SEZZ	Spacer, Headphone Jack
	PCQVU3058AGFT	Cover, Illumination
	LANGK0113AGZZ	Bracket, Pulley (One)
	PGUMM0025AG09	Holder, FM Stereo Indicator

MODEL
SA-607H

SHARP

PARTS LIST

REF. NO.	PART NO.	DESCRIPTION
PL901	HSSND0048AGSA	Pilot Lamp, Pointer
PL902, PL903, PL904, PL905, PL906, PL907, PL908	RLMPP0002AGZZ	Pilot Lamp, Dial Illumination
PL909	RLMPM0018AG00	Pilot Lamp, FM Stereo Indicator
	QFSHD2001SEZZ	Holder, Dial Illumination Lamp
	LHLDW3003CEFD	Wire Holder, Tall
	LANGT0363AGFT	Bracket, Terminal
	QFSHP1001AGZZ	Holder, Fuse (F901)
	QLUGL0201SEZZ	Lug Terminal, 2 Terminal/1 Ground
	QLUGL0302SEZZ	Lug Terminal, 3 Terminal/1 Ground
	QLUGL0402AGZZ	Lug Terminal, 4 Terminal
S0901	QSOCJ0204SEZZ	Socket, FM Antenna
S0902	QSOCJ0205SEZZ	Socket, AM Antenna
S0903	QSOCJ0203SEZZ	Socket, Speaker, Front/Left (A)
S0904	QSOCJ0203SEZZ	Socket, Speaker, Front/Right (A)
S0905	QSOCJ0203SEZZ	Socket, Speaker, Front/Left (B)
S0906	QSOCJ0203SEZZ	Socket, Speaker, Front/Right (B)
S0907	QSOCJ0203SEZZ	Socket, Speaker, Rear/Left
S0908	QSOCJ0203SEZZ	Socket, Speaker, Rear/Right
S0909	QSOCZ0022AGZZ	Socket, Auxiliary
S0910	QSOCZ0022AGZZ	Socket, Phono 1
S0911	QSOCZ0022AGZZ	Socket, Phono 2
S0912	QSOCZ0022AGZZ	Socket, Tape
S0913	QSOCE0301AGZZ	Socket, Voltage Selector
	QTANN9007AGZZ	Terminal, Ground
	QFSHD1001AGZZ	Holder, Fuse (F601, F602, F801)
RLY601, RLY602	RRLYZ0010AGZZ	Relay, Protection Circuit
	RCORF0003AGZZ	Core, Transistor
J901	QJAKB0011AGZZ	Jack, Headphone
	LANGT0364AGZZ	Bracket, Heatsink, Left
	LANGT0365AGZZ	Bracket, Heatsink, Right
	PRDAR0054AGFW	Heatsink
	PSPAZ9015AGZZ	Spacer, Transistor, Mica
	PSPAZ9016AGZZ	Spacer, Transistor
	QHWS-3002AGFN	Lug Terminal, Transistor
	QPLGN0702AGZZ	Socket, 7 Pin
	QACCV0001AGZZ	Cord, AC Supply (SEEG)
	QACCZ0006AG00	Cord, AC Supply (SUK), 3 Parallel
	QACCS0004AG00	Cord, AC Supply (Switzerland)
	QPLGA0205AGZZ	Plug, AC Supply Cord (Switzerland)
	QACCB0002AG09	Cord, AC Supply Cord (SUK) 2 Parallel
	QACCN0001AGZZ	Cord, AC Supply Cord (SEMKO)
	QANTW0009AG01	Feeder, FM Antenna
	QPLGF0201SEZZ	Plug, FM Antenna Feeder
	LANGT0366AGZZ	Bracket, Bar Antenna
	LHLDC1044AGZZ	Holder, Core
	QLUGL0201SEZZ	Lug Terminal, 2 Terminal/1 Ground
	LANGK0111AGZZ	Bracket, Tuning Gang
	PGUMM0018AG00	Cushion, Rubber, Tuning Gang
	PSPAJ0010AGFA	Spacer, Tuning Gang
	QSOCN0702AGZZ	Plug, 7 Pin

REF. NO.	PART NO.	DESCRIPTION
	QACCZ0002AG08	Cord, AC Supply
	QPLGA0201AGZZ	Plug, AC Supply Cord
	LHLDZ3036AGFW	Holder, Diode
	LANGF0244AGZZ	Bracket, Power Printed Wiring Board
	LBSHC0004AGZZ	Bushing, AC Supply Cord, Large
	LBSHC0007AFZZ	Bushing, AC Supply Cord, Small
	LCHSM0146AGZZ	Chassis, Main
	LX-NZ0013AGFN	Nut, Headphone Jack
METER 901	RMTRL0062AGZZ	Meter, Tuning
	PCUSU0102AG00	Cushion, Meter, Shading
	NDRM-0008AG09	Drum, Dial Stringing
	NFLYT0003AGZZ	Flywheel
	HSSND0048AGSA	Pointer
	PSHEP0007SGZZ	Sheet, Pointer
	PSHEF0043AG00	Sheet, Shading, Pre-setting
	PSPAB0045AGFW	Spacer, Dial Scale Retaining
	HDALP0058AGSA	Dial Scale
	LANGF0243AGFT	Retainer, Dial Scale
	PSTPK0005AGZZ	Stopper, AM Antenna Coil
	HPNLC3166AGSA	Panel, Control
	PSPAS0015AGZZ	Spacer, Push-Switch
	PCUSS0003AG00	Cushion, Shading, Control Panel
	PSPAN0004AF09	Spacer, Headphone Jack, Control Panel
	JKNBK0040AGSA	Knob, Push Switch
	JKNBK0041AGSA	Knob, Power Switch
	JKNBN0135AGSA	Knob, Tuning
	JKNBN0136AGSA	Knob, Volume
	PSHEF0040AG00	Sheet, Power Switch
	PSHEF0041AG00	Sheet, Speakers Switch
	PSHEF0042AG00	Sheet, Push Switch
	GCAB-0133AGSA	Cabinet
	LX-BZ0110AGFD	Screw, Cabinet Retaining
	PCOVW3005AGFJ	Cover, Voltage Selector
	QPLGS0504AGZZ	Plug, Short Circuit
	MSPRT0013AFFJ	Spring, Dial Stringing
	DUNTF0025AG01	FM Tuner Unit Assembly

A2608-2.5MH
Printed in Japan